



MINISTRY OF NATIONAL GUARD HEALTH AFFAIRS  
OF PATHOLOGY AND LABORATORY MEDICINE  
RECEIVING AND ACC LABORATORY

---

# 2017

---

## LABORATORY SPECIMEN COLLECTION GUIDELINES

TABLE OF CONTENTS		PAGE
INTRODUCTION		3
OBJECTIVES		3
ORDERING OF LABORATORY TESTS IN HIS-BESTCARE COMPUTER SYSTEM		3
PATIENT IDENTIFICATION		4
PATIENT PREPARATION		5
PROPER ORDER OF DRAW		
SYRINGE METHOD (OPEN SYSTEM)		7
EVACUATED METHOD (CLOSE SYSTEM)		8
TYPES OF BLOOD COLLECTION CONTAINERS		
TABLE 1		9
TABLE 2		10
TABLE 3		11
SPECIMEN COLLECTION POLICIES		12
PREPARATION OF PHLEBOTOMY SUPPLIES		12
SAFETY PRECAUTIONS AND INFECTION CONTROL PRACTICES		13
BLOOD COLLECTION PROCEDURE		14
LABORATORY SPECIMEN WITH SPECIAL HANDLING AND STRICT TIME RECEIPT		19
PROPER SPECIMEN LABELING		
PROPER BESTCARE LABEL AFFIXING – IMAGE 1		20
INAPPROPRIATELY LABELED TUBE COLLECTION TUBE – IMAGE 2		21
METHODS OF SAMPLE TRANSPORTATION TO RECEIVING SECTION		23
REASONS FOR SPECIMEN REJECTION		24
IRRETRIEVABLE SAMPLES		24
HISTOPATHOLOGY AND CYTOLOGY SAMPLES		25
SAMPLE INTEGRITY		26
SPECIMEN COLLECTION PRIORITIES AND TURN AROUND TIME		27
URINE COLLECTION		
PATIENT PREPARATION PRIOR URINE COLLECTION		28
KASCH LABORATORY		29
ORDERABLE PANELS and its CONTENTS		30
DEFINITION OF TERMS or TEST SYNONYMS		34
IN-HOUSE LABORATORY TEST LIST		36
SEND-OUT / REFERRED TESTS		95
DEPARTMENT OF PATHOLOGY AND LABORATORY CONTACT NUMBERS		96

## 1. INTRODUCTION

These guidelines are provided to ensure correct, error-free and safe blood collection. understanding and following these instructions, you will be adhering to best practices and pol of the King Abdulaziz Medical City- Ministry of National Guard Health Affairs (KAMC-MNG and King Abdullah Specialized Children's Hospital(KASCH).

## 2. OBJECTIVES

- To provide an overview of the Phlebotomy process:
  - ❖ Correct Patient Identification
  - ❖ Proper Specimen Collection Policies
  - ❖ Proper Blood Collection Procedures
  - ❖ Correct Order of Draw
- To provide an overview on proper urine collection and storage.
- To provide a list of different tests available in the laboratory.
- To provide guidelines on the minimum volumes required, tube to be used and sai requirements for the different tests available in the laboratory.

## 3. ORDERING OF LABORATORY TESTS IN THE HOSPITAL INFORMATION SYSTEM (HIS)

The laboratory tests of each patient are ordered electronically via BESTCare HIS and perfor exclusively by authorized physicians.

***\*\*\*All Laboratory specimens must have the physician's proper and complete orders be sending to the laboratory in order to avoid any delay in processing. Likewise, all nurses i immediately perform sampling in BESTCare computer system after successful blood extracti***

**The only samples with accompanying requisition forms:**

- a) Virology tests  
**MERS-CoV (Corona) Samples**
- b) Blood bank tests  
**Blood Transfusion Components Request**

***\*\*NOTE: For emergency cases such as CCRT and HIS (BESTCare) downtime, laboratory specimen with completed laboratory requisition form may be accepted.***

**In limited cases where a completed requisition form is deemed appropriate and acceptable by the section supervisor or the division head, the following information listed below must be clearly written:**

- Patient's full name
- Patient's medical record number
- Patient's date of birth and age
- Patient's gender
- Badge and pager number of the requesting physician
- Date of specimen collection and time
- Location or clinic where the sample came from
- Badge number of the collector
- Clinical Information or patient's diagnosis
- Source of specimen (when appropriate)
- Laboratory test requested
- Last menstrual period (for gynecological specimens)

***\*\*NOTE: Appropriate clinical data is mandatory for the following section of the Laboratory - Cytology, Histology, Molecular, Metabolic Laboratory and Referral-Send out.***

## **4. PATIENT IDENTIFICATION**

***All patients must be positively identified before the specimen collection is performed.***

**For Inpatients:**

- The two patient identifiers must be present (*i.e. Patient's complete/full name and Patient's Medical record number*) on the patient's wrist band.
- The patient's room and bed number may not be used as an identifier.
- While checking the wrist band, ask the patient to state his/ her full name or if not possible (e.g. newborn patients), the relative of the patient.
- The patient's wrist band must match exactly the full name and the medical record number of the patient on the collection list and BestCare QR barcode.

**For Outpatient:**

- While checking the hospital medical card, appointment slip and Iqama or Saudi ID, ask the patient to state his/ her full name or if not possible, the relative of the patient.
- The patient's medical card, Iqama or Saudi ID must match exactly the full name and the medical record number of the patient on the BESTCare computer system.



## Patient Identification for Blood Bank Compatibility Testing

### For Inpatients:

- The Phlebotomist will check for the corresponding name and MRN, comparing the armband to the collection list and BestCare QR Barcode prior the collection of laboratory specimen.
- While checking the wrist band, ask the patient to state his/ her full name or if not possible, the relative of the patient.
- Any discrepancies e.g. missing wristband, incorrect name on the wristband, conflicting wristbands, missing ID information or any illegible wristband, will immediately be reported to the Charge Nurse.
- Specimen collection will not be carried out until the identified discrepancies have been resolved.
- If the laboratory becomes aware of a potential error in patient identification or other information e.g. missing or wrong Phlebotomist initial, date and time of collection on a specimen label, the laboratory reserves the right to request a re-collection of the specimen.

### For Outpatients:

- All outpatients who present for specimen collection must, as part of the registration procedure, be positively identified and verified via a valid MRN card. Saudi Nationals can also be positively identified via Saudi ID, similarly, Iqama for non-Saudis.

## 5. PATIENT PREPARATION

The Phlebotomist must ask the patient if there is any preparation observed before undergoing a specific laboratory test such as fasting, diet restrictions and avoidance of certain activities (smoking, strenuous exercise, etc.) that may compromise the result.

***\*NOTE: Fasting for blood sugar test should be 8 to 10 hours while lipid test should be 9 to 12 hours.***

The phlebotomist must ask the patient for any allergy to latex supplies or iodine disinfectants which will be used during the sample collection.

***\*NOTE: Use non-latex tourniquet (or apply over sleeves) and gloves for patients with allergy to latex. Use Chlorhexidine swabs as disinfectants for patients with allergy to iodine for blood culture collection.***

## Reassuring the patient:

- 1) Explain clearly and courteously the procedure to the patient.

*\*If the patient is a child, talk softly and calmly. It is important to keep the child at ease and comfortable.*

- 2) If the patient refuses to continue the procedure, **DO NOT PROCEED**, and immediately:

*\* Inform the nurse in-charge of the patient and ask for his/her badge number. Do documentation on the communication logbook and phlebotomist endorsement logbook.*

## Proper positioning of the patient

### For **Inpatients**:

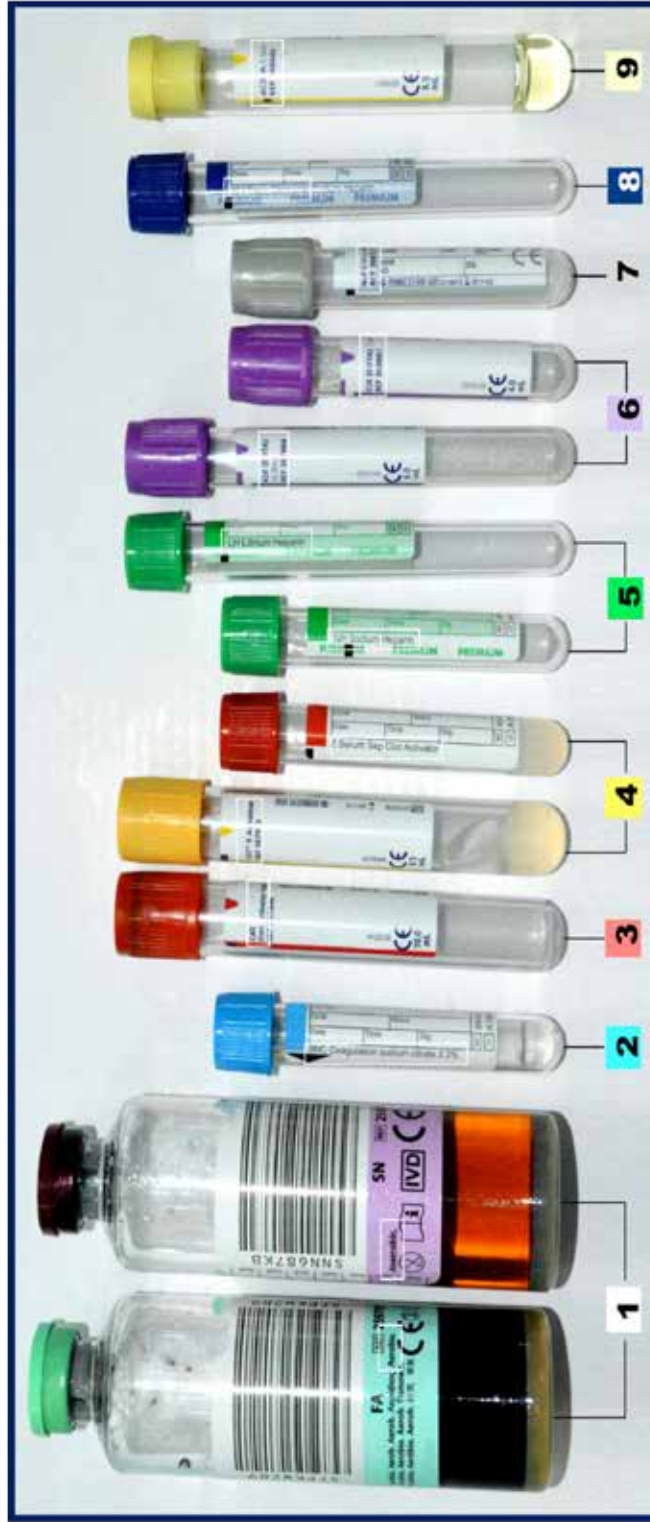
- Patients must lie in bed or sit in a comfortable position.
- Extend the arm so as to form a straight line from the shoulder to wrist.
- Add support under the arm if necessary.

### For **Outpatients**:

- Ambulatory or outpatients must sit in a chair with armrest to protect fainting patients from fall.
- Place arm on the table or on the armrest in a straight line from the shoulder to wrist.
- The arm must be slightly bent at the elbow. If support is needed, ask the patient to form a fist with the other hand and place it under the elbow.

## SYRINGE METHOD – (OPEN SYSTEM )

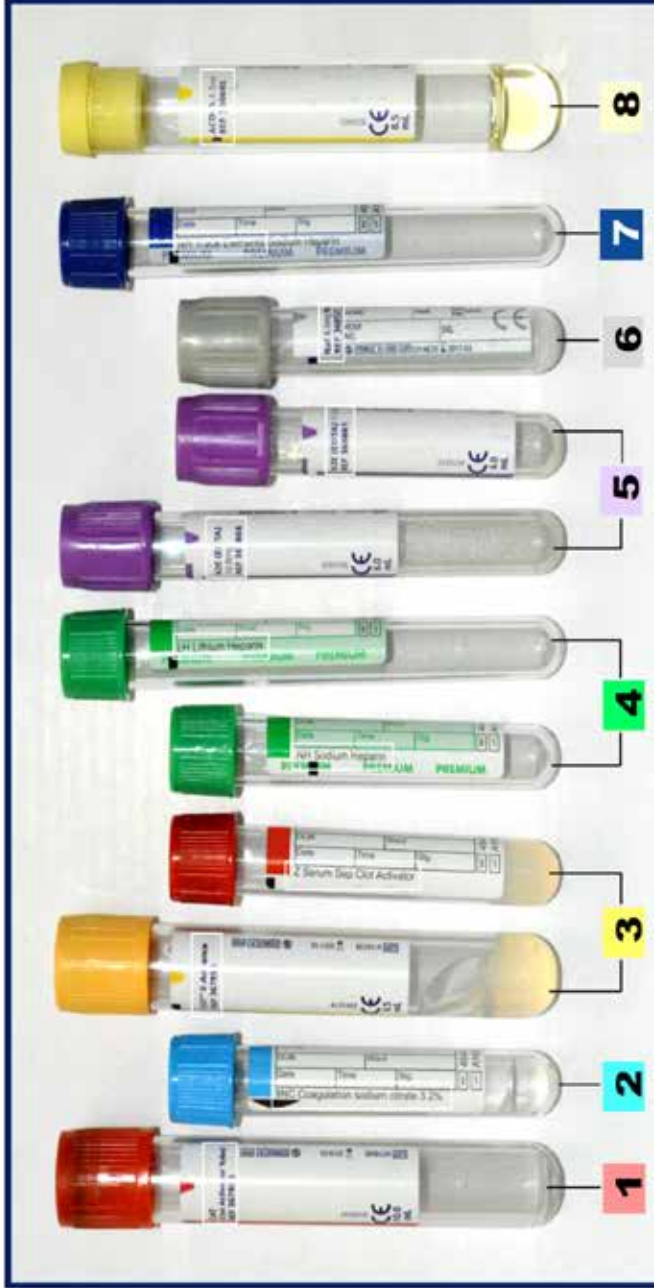
If open system is used, gently pull the plunger. Pulling the plunger too rapidly or forcefully might cause clotting process to be immediately activated or traumatizing the red cells that leads to hemolysis. Also, to avoid blood from clotting, immediately transfer the blood into the tube (blood collection container) after blood collection.



Aerobic Isolation Bottle	Anaerobic Isolation Bottle	Citrated Tube	Plain tube (Tube w/o GEL)	Serum Separator Tubes	Heparinized Tubes	EDTA Tubes	Sodium Fluoride	Trace Element	ACD tube
Blood Culture Collection Bottles		Commonly used For Coagulation Testing	Commonly used for Vit D5OH.	Thin, 4.0 ml filling capacity. Commonly used for Chemistry testing	Sodium Heparinize Commonly used for Amniocentesis test and other routine Cytogenetic testing	Lithium Heparinize Commonly used for Plasma Amino Acids	Small, 4.0 ml filling capacity. Commonly used for Type & Screen samples.	Commonly used for Zinc testing samples.	Big - large Diameter, Glass tubes, 8.5 ml filling capacity. Commonly used for HLA testing samples.
1		2	3	4	5	6	7	8	9

## EVACUATED METHOD – (CLOSE SYSTEM)






If closed system is used, as soon as the needle enters the vein, insert the collection tube into the holder as far as it may go. When filling a number of different tubes, as soon as the sufficient volume is collected, gently remove and replace it by inserting the succeeding tubes according to the proper order of draw.



Plain tube (Tube w/o GEL)	Citrate Tube	Serum Separator Tubes	Heparinized Tubes	EDTA Tubes	Sodium Fluoride	Trace Element	ACD tube
Commonly used for Vit.D5OH and For Flushing.	Commonly used For Coagulation Testing	Thin, 4.0 ml filling capacity. Commonly used for Chemistry testing	Sodium Heparinize Commonly used for Ammonia test and other routine Cytogenetic testing.	Lithium Heparinize Commonly used for Plasma Amino Acids	Tall, 6.0 ml filling capacity. Commonly used for Type & Screen samples.	Small, 4.0 ml filling capacity. Commonly used for CBC.	Commonly used for Lactic Acid Testing samples.
Big, larger diameter, 8.5ml filling capacity. Commonly used for Serological tests.	Commonly used for Zinc testing samples.	Commonly used for HLA testing samples.	Commonly used for Zinc testing samples.	Commonly used for Lactic Acid Testing samples.	Commonly used for Zinc testing samples.	Commonly used for Lactic Acid Testing samples.	Commonly used for HLA testing samples.
1	2	3	4	5	6	7	8



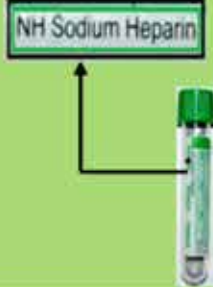




## 7. TYPES OF BLOOD COLLECTION CONTAINERS

TABLE 1				
SEQUENCE NUMBER	COLLECTION TUBE ILLUSTRATIONS	COLLECTION TUBE DESCRIPTIONS	DETERMINATIONS and COMMON USE	INVERSION TIMES
1		<p><b>( PEDIATRIC ) BLOOD CULTURE COLLECTION BOTTLE</b></p> <p><b>YELLOW CAP</b></p> <p>Contains 40 ml TSB or SBF. Requires a minimum volume of 1ml to secure blood to additive ratio, necessary for optimum isolation of microorganisms.</p>		8 – 10 times
		<p><b>( ADULT ) AEROBIC BLOOD CULTURE COLLECTION BOTTLE</b></p> <p><b>GREEN CAP</b></p> <p>Contains 30 ml Peptone –enriched TSB, supplemented with BHI solids and activated charcoal ( Blood or SBF). Requires a minimum volume of 8ml.</p>	In case, insufficient amount of blood was collected, this tube should be the <u>priority</u> as most microorganisms isolated is grown through this media.	8 – 10 times
		<p><b>( ADULT ) ANAEROBIC BLOOD CULTURE COLLECTION BOTTLE</b></p> <p><b>MAROON CAP</b></p> <p>Contains 30 ml Peptone –enriched TSB, supplemented with BHI solids or SBF. Requires a minimum volume of 8ml.</p>		
2		<p><b>Na CITRATED TUBE</b></p> <p><b>LIGHT BLUE CAP</b></p> <p>Anticoagulant: <u>0.109M Sodium Citrate</u></p> <p>Available in different volumes: 1.8 ml , 2.0 ml , 2.7 ml , 3.0 ml</p>	<p><u>Coagulation testing</u></p> <p>Requires exact volume. Fill the tube <u>until the black mark</u> for appropriate blood coagulation ratio.</p>	3 – 4 times
3		<p><b>PLAIN TUBE without GEL</b></p> <p><b>Clot activator Tube</b></p> <p><b>RED CAP w/o GEL</b></p> <p>Anticoagulant: None</p>	<p><u>Vitamin D 25 OH,</u></p> <p><u>Cryoglobulin,</u></p> <p>or</p> <p><u>for flushing</u> if Syringe method or open System is used.</p>	5 – 6 times

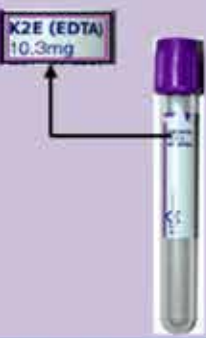


**\*\* Proper Inversion times are essential for Specimen integrity.**

TABLE 2

SEQUENCE NUMBER	COLLECTION TUBE ILLUSTRATIONS	COLLECTION TUBE DESCRIPTIONS	DETERMINATIONS and COMMON USE	INVERSION TIMES
4	 <p>Serum Sep Clot Activator</p>	<p><u>SERUM SEPARATOR TUBE ( SST )</u></p> <p><u>YELLOW CAP with GEL</u></p> <p>Anticoagulant: None</p> <p>Available in 4.0 ml and 5.0 ml</p>	<p><u>CHEMISTRY assays</u></p> <p>Do not use for serological assays, instead used the bigger diameter same type of tube designed for that purpose.</p>	8 – 10 times
	 <p>SST™ II Advance</p>	<p><u>BIG SERUM SEPARATOR TUBE ( BIG SST )</u></p> <p><u>YELLOW CAP with GEL</u></p> <p>Anticoagulant: None</p>	<p><u>SEROLOGY assays</u></p> <p>Such as tests with <u>prefix: Anti -</u></p> <p>or tests with <u>suffixes:</u></p> <p><u>Antibody</u> ( a.k.a <u>AB, Ab, ab</u> )</p> <p><u>Antigen</u> ( a.k.a <u>AG, Ag, ag</u> )</p>	8 – 10 times
5	 <p>NH Sodium Heparin</p>	<p><u>Na HEPARIN TUBE</u></p> <p><u>GREEN CAP</u></p> <p>Anticoagulant : <u>68 I.U Sodium Heparin</u></p> <p><b>**usually MISTAKEN or CONFUSED with LITHIUM HEPARINIZED tube**</b></p>	<p><u>Ammonia and Chromosomal analyses.</u></p>	8 – 10 times
	 <p>LH Lithium Heparin</p>	<p><u>Li HEPARIN TUBE</u></p> <p><u>GREEN CAP</u></p> <p>Anticoagulant : <u>68 I.U Lithium Heparin</u></p>	<p><u>Plasma Amino Acid.</u></p> <p><b>** Extra precaution when using this type of tube as it is usually MISTAKEN or CONFUSED with Sodium heparinized tube</b></p>	8 – 10 times
6	 <p>K2E (EDTA)</p>	<p><u>EDTA TUBE ( 4.0 ml)</u></p> <p><u>PURPLE or LAVENDER CAP</u></p> <p>Anticoagulant <u>7.2 mg EDTA</u></p> <p><b>** Avoid using Type &amp; Screen sample tube because this cannot fit in the hematology machine analyzer. Therefore, it will be rejected and a new sample will be necessitated.**</b></p>	<p><u>CBC</u></p> <p>and other</p> <p><u>Hematology assays</u></p>	8 – 10 times

**\*\* Proper Inversion times are essential for Specimen integrity.**

TABLE 3

SEQUENCE NUMBER	COLLECTION TUBE ILLUSTRATIONS	COLLECTION TUBE DESCRIPTIONS	DETERMINATIONS and COMMON USE	INVERSION TIMES
6		<b>TALL EDTA TUBE ( 6.0 ml )</b>  <b>PURPLE or LAVENDER CAP</b> Anticoagulant : <b>10.8 mg EDTA</b>	for <a href="#">Type &amp; Screen</a> <a href="#">GENETICS ( MBL ) Testing</a> , <a href="#">Virology Testing</a> ( MML ) samples	<b>8 – 10 times</b>
7		<b>Na FLUORIDE TUBE</b>  <b>GRAY CAP</b> Anticoagulant : <b>6.0 mg Sodium Fluoride with 12.0 mg Na2EDTA</b>	<a href="#">Lactic Acid test</a> and <a href="#">Methanol testing</a>	<b>8 – 10 times</b>
8		<b>ACD TUBES</b>  <b>YELLOW CAP GLASS TUBE</b> Anticoagulant <b>1.5 mL Acid Citrate Dextrose</b>	<a href="#">HLA Testing</a>	<b>8 – 10 times</b>
9		<b>TRACE ELEMENT TUBE</b>  <b>ROYAL BLUE CAP</b> Anticoagulant: None	<a href="#">trace elements</a> ( e.g. Zinc and Copper ), and <a href="#">Nutrient determinations</a> .	<b>8 – 10 times</b>
10		<b>QUANTIFERON TB (TBQ TUBES)</b>  Anticoagulant: None Special set of tube from SEROLOGY. Consist of four color coded tubes, detailed as follows:  Gray – Nil Purple – Mitogen Green – TB1 Yellow – TB2	<b>** Transfer exactly 1mL of blood on each tube. Fill the tube until black mark as your reference. After collection, invert the tubes and send within 6-8 hours to the Serology lab **</b>	<b>10 times</b>

**\*\* Proper Inversion times are essential for Specimen integrity.**

## 8. SPECIMEN COLLECTION POLICIES

### 1) Avoid drawing blood from the following sites:

- Arm with a running IV fluid
- Arm with a shunt or graft
- Edematous Arm
- Arm with Hematoma
- Femoral and Jugular veins
- Artery
- Mastectomy Side
- Paralyzed Side

### 2) Do not draw blood from patients who refuse.

- Phlebotomist or nurse can extract blood from a patient, maximum of **TWO** tries.
- Phlebotomist or nurse may draw patients from an on-going blood transfusion if the doctor/nurse insists due to a necessary blood test. In this case, get the badge number of the doctor and the nurse in-charge. Also, inform the Receiving Supervisor and the Section, and indicate in the barcode label that the blood was taken during the blood transfusion.

### 3) All **NON-LAB COLLECT** orders should be collected by nurses. For any hardstick patient, the nurse can call the Receiving Lab or page the phlebotomist to perform the blood extraction.

***AS PER APP No. 1430-12 Section 5.5: All laboratory specimens belonging to MNG-HA employees not collected by Emergency department, Inpatient units, Employee Health Clinic or Outpatient Clinics must not be accepted by the laboratory for further processing. Employees are not allowed to collect and process their own specimen.***

## 9. PREPARATION OF PHLEBOTOMY SUPPLIES

- Non-sterile gloves
- Chlorhexidine Gluconate scrub or Povidone Prep (2 months old), for blood culture collection.
- Alcohol Prep pad
- Gauze
- Disposable Tourniquet
- Evacuated collection tubes
- Evacuated tube holder
- Band aids, tapes or pressure bandages
- Vacutainer Needles/Butterfly Needles



## 10. SAFETY PRECAUTIONS AND INFECTION CONTROL PRACTICES

- a) Treat all samples as potentially infectious
- b) Perform hand hygiene (hand washing or using hand sanitizer) before and after patient contact.
- c) Change gloves between each patient.
- d) Discard the disposable tourniquet after each blood collection.
- e) Never take venipuncture trays inside the isolation rooms.
- f) Do not use latex gloves and tourniquets for patients with allergy to latex.
- g) Additional precautionary measures in Collecting and Handling of Pandemic Viral Respiratory Samples (i.e. H1N1 and MERS-CoV) are applied to prevent the prevalence of infection.

### ❖ *H1N1 influenza*

- an infectious disease caused by type A strains of the influenza virus that has been causing global concern as a potential pandemic threat. It is often referred to as “bird flu” or “chicken ebola”. Experts are concerned that the coexistence of human flu viruses and avian flu viruses will provide an opportunity for genetic material to be exchanged between species-specific viruses, possibly creating a new virulent influenza strain that is easily transmittable and lethal to humans.

### ❖ *Human corona viruses*

- usually cause mild to moderate upper respiratory tract illnesses. The two corona viruses of great importance are SARS-CoV (Severe Acute Respiratory Syndrome-Corona Virus) and MERS-CoV (Middle East Respiratory Syndrome- Corona Virus)

### **Precautions related to respiratory secretions (droplet) and airborne isolations**

- Wear N-95 facemask or Disposable Surgical facemask when in close contact or upon entering the room of the patient.
- Use personal protective equipment (i.e. disposable gloves and gowns)

### **Precautions related to direct patient contact**

- Perform hand hygiene before and after contact with the patient and his/her surroundings and immediately after removal of personal protective equipment.

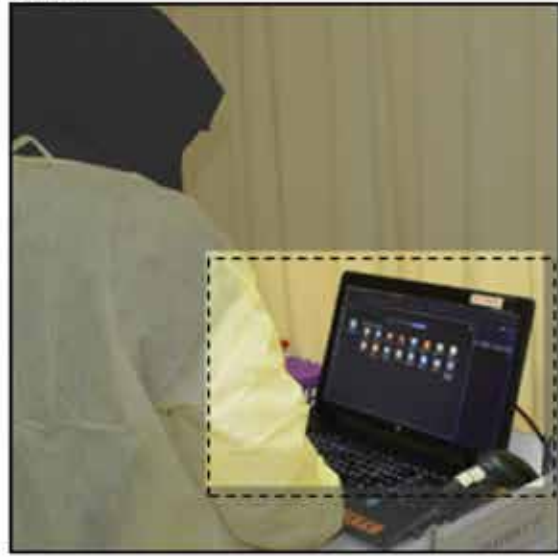
## 11. BLOOD COLLECTION PROCEDURE

Step 1



Proper Patient Identification. (Figure - 1)

Step 2



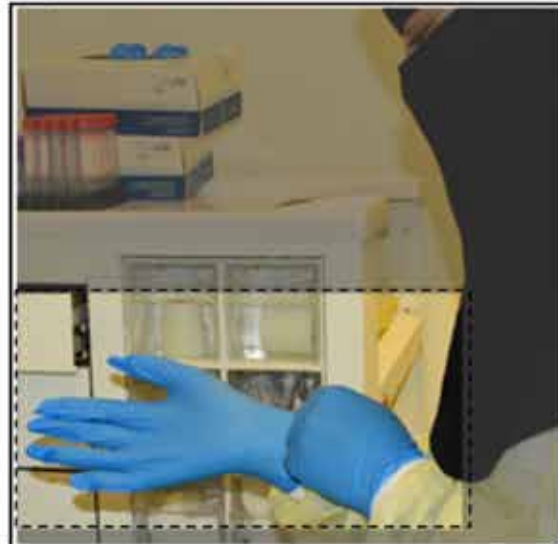
Check patient's lab test orders. (Figure-2)

Step 3



Perform hand hygiene (Figure-3)

Step 4



Put on gloves (Figure-4)

### Step 5



Prepare supplies. (Figure-5)

### Step 6



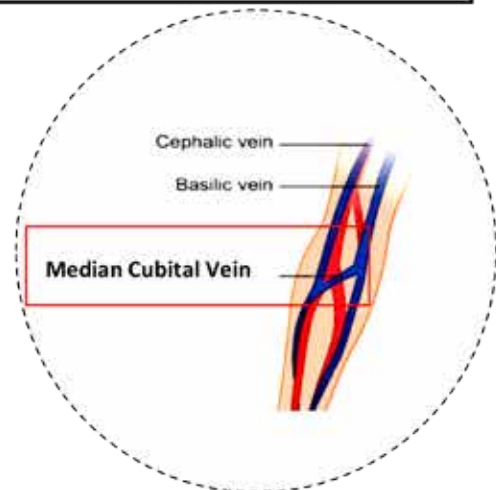
Apply tourniquet 3-4 inches above venipuncture site (Figure 6)

\* Never leave the tourniquet longer than 1 minute

### Step 7



Select the vein site. Using the index finger, palpate the vein. (Figure 7)



\* The **Median Cubital** vein is used most frequently

**Step 8**



Clean the venipuncture site with 70% alcohol or with povidone iodine swab if there is blood culture request. (Figure 8)

**Step 9**



Perform venipuncture. (Figure 9)  
Hold needle with bevel up at approximately 15-30° angle to skin and in direct line with vein. Insert needle into vein with smooth motion.

**Step 10**



Push collection tube into holder. (Figure 10)

**Step 11**



Release the tourniquet as soon as the blood flow is established. (Figure 11)



#### Step 12



Remove tube as soon as blood flow stops. Immediately invert the tube in a gentle manner to mix the collected blood to tube's additive. (Figure 12)

#### Step 13



Once all the necessary tubes are filled, remove the last tube prior withdrawing the needle from the vein. (Figure 13)

#### Step 14



Place clean gauze over venipuncture site and gently remove the needle. (Figure 14)

#### Step 15



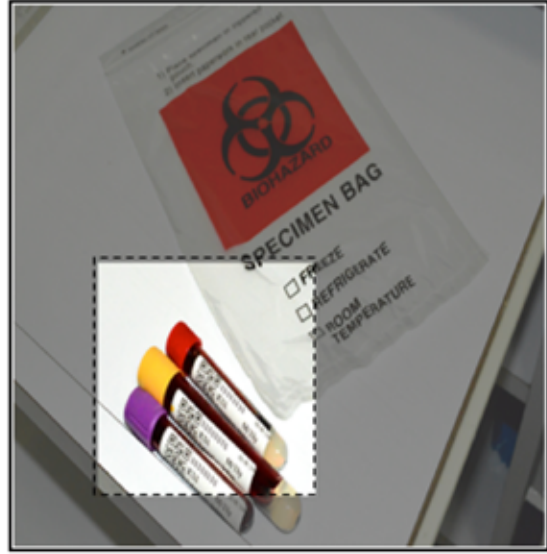
Place a tape over the gauze and apply pressure to stop bleeding. (Figure 15)

**Step 16**



Properly dispose all the supplies consumed.  
(Figure 16)

**Step 17**



Perform sampling and secure proper labeling of  
the samples procured.  
(Figure 17)

***\*\*NOTE: For any adverse reactions to phlebotomy that may occur BEFORE, DURING or AFTER the procedure, risk assessment and immediate response guidelines has been established to ensure the safety of the patient and all staff members.***

**RISK ASSESSMENT AND IMMEDIATE RESPONSE GUIDELINES:**

- 1) The Phlebotomist must observe and assess the patient of any signs of adverse reactions.
- 2) With observation of signs of an adverse reaction, the Phlebotomist must **NOT Proceed** with the procedure, **Cease** the procedure, or **Prevent** the patient from leaving the area.
- 3) To ensure safety of the patient and staff members, the phlebotomist must immediately identify the applicable procedure for the reaction or contact the EMS (Emergency Medical Services) for severe reactions that may require further medical assistance.
- 4) The Supervisor and the Team Leader must be notified by the Phlebotomist, informing them of the incident.
- 5) For Mild adverse reactions, it is not necessary to generate an SRS but completing the Patient Adverse Reaction from Phlebotomy report is required. Whereas for Severe Adverse Reactions, it is imperative to accomplish an SRS and Patient Adverse Reaction from Phlebotomy Report.

## 12. LABORATORY SPECIMENS WITH SPECIAL HANDLING AND STRICT TIME OF RECEIPT.

- **Examples of laboratory Tests with Cut-off time, therefore, samples must reach the testing sections before its cut-off time:**

- **TBQ (QUANTIFERON TB) - 4 special TBQ tubes (1 ml each)**

Accepted during weekdays and before cut-off time.

**Cut-Off Time:**

**KAMC-MNGHA : 1500h/03:00 PM**

**KASCH : 1400h/02:00 PM**

- **Selected drugs such as:**

a.) TACROLIMUS    b.) CYCLOSPORIN    c.) SIROLIMUS

**Cut-Off Time:**

**KAMC-MNGHA : 1000 AM**

**KASCH : 0900 AM**

- **Orders that should be placed on ice and transported immediately after collection**

- AMMONIA
- iPTH
- LACTIC ACID
- PYRUVATE
- BCR-ABL
- SNRPN for Prader Willi Syndrome
- METHANOL
- RIBAVIRIN

- **Laboratory Tests that must be protected from light or covered with foil immediately after collection**

- RBC FOLATE
- SERUM FOLATE
- VITAMIN A
- VITAMIN E

- **Orders such as ALCOHOL and ETHANOL**

- Avoid using alcohol prep pads for this test orders. Cleanse the site using Povidone-Iodine prep swabs on a circular outward motion.
- Collection tubes should not be opened and transported immediately after collection

- **Samples that should have confirmed prior booking and must be transported immediately after collection.**

- Platelet Aggregation Study
- Platelet Function Assay ( PFA)

- **Laboratory Tests scheduled as TIME STUDY, therefore collected at exact scheduled time**
  - THERAPEUTIC DRUGS
    - ( e.g. Vancomycin, Amikacin, Gentamycin )
      - TROUGH – should be drawn within 30 minutes prior to next dose
      - PEAK – should be drawn 30 minutes after the end of infusion
  - Coagulation tests such as PT/PTT
  - Synacthen stimulation test for CORTISOL and ACTH
  - GLUCOSE TOLERANCE TESTS
  - POST-PRANDIAL BLOOD SUGARS
  - Other drugs such as TACROLIMUS, CYCLOSPORIN and SIROLIMUS
  - INSULIN and GROWTH HORMONE stimulation
  - Hormonal testing cycle

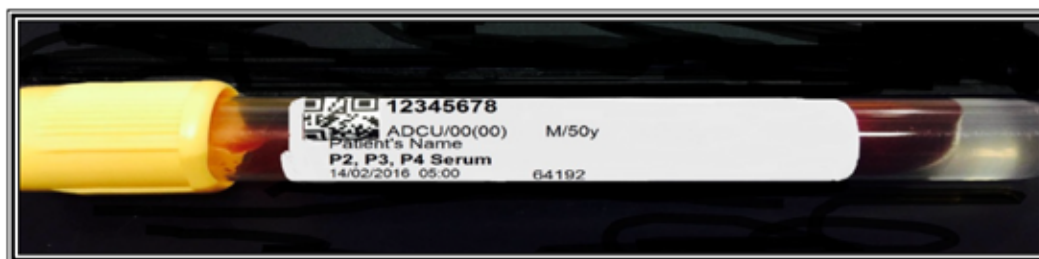
### 13. PROPER SPECIMEN LABELING

***\*NOTE: The patient's location (room and bed number) is not an acceptable identifier.***

- ✓ After performing blood extraction, the phlebotomist must perform “**Sampling**” through BestCare Computer System. This then generates a barcode label which will be affixed to the samples.
- ✓ All Primary specimen containers must be labeled with the BestCare Addressograph. The identifying label must be attached to the specimen container(s) immediately after collection and must not be deferred until a later time.

***\*NOTE: Please refer to the image below (Image 1) regarding proper affixing of BESTCARE labels on the procured samples.***

***Image 1***



When labeling the sample, the CAP of the collection tube must lodge on your LEFT and the BESTCARE LABEL's orientation must be UPRIGHT.



*Otherwise, specimen that is inappropriately labeled (Image 2) may cause delay in processing (i.e. affixing of machine readable Cerner Millennium labels) and analysis.*

*Image 2*



Observe the patient details that are obstructed by **OVERLAPPING** barcodes. These extended parts of the stickers are prone to be entangled or entrapped with the machine conveyor. Hence, compromising the processing time and analysis not only for this sample alone but the whole batch as well.

- 1) The BESTCare barcode labels attached to the specimen containers must include the following information:
  - Patient's full name
  - Patient's medical record number
  - Requesting location or ward
  - Patient's age and gender
  - Collection date and time
  - Test Name
  - Badge Number of the Person who did the sampling
- 2) Sample will be sent to the Main Laboratory processing area. A machine readable barcode (Cerner Millennium barcode label) will then be affixed and must include the following information:
  - Patient's full name
  - Patient's medical record number
  - Requesting location or ward
  - Patient's date of birth, age and gender
  - Collection date and time
  - Collection priority status
  - Sample's accession number
  - Test name
  - Badge Number of the Person who attached the Cerner Millennium Barcode
- 3) The badge number of the person attaching the Cerner Millennium Barcode to the sample should be written on the barcode label.

***Note: In limited situations, a single identifier may be used if it can uniquely identify the specimen. For example. In trauma situation where a patient's identification is not known, specimen may be submitted for testing labeled with unique code that is traceable to the trauma patient. Other examples may include forensic specimens, coded or de-identified research specimens, or donor specimens labeled with unique code decryptable only by submitting location.***

## **Specimen Labeling for Pre transfusion testing**

✓ **For Inpatients:**

blood specimen collected for pre transfusion must be labeled handwritten at the patient's bedside right after the collection. The two identifiers (i.e. Medical Record number and Patient's Full Name) must be present in the handwritten label and must appear **"Exactly the Same"** as it occurs in the patient's armband and BestCare barcode label.

✓ **For Outpatients:**

blood specimen collected for pre transfusion must be immediately labeled with a BestCare barcode label after blood sample collection. In some cases such as armabanded patients (i.e. Chemo or Oncology Patients) , the orange sticker must be affixed to the tube together with the BestCare Label but not obstructing any patient details.

✓ **All blood specimen collected for pre transfusion must undergo "SAMPLING"** in the BESTCare system. The BESTCare barcode label containing the same patient information and badge number of the person labeling the sample will then be affixed to the specimen container.

## **Specimen Labeling for Cord blood testing**

Cord blood samples submitted to the Receiving Section must be labeled immediately after the collection. By performing **"Sampling"**, a BestCare label will be generated and must be affixed at the bedside. This label must contain the following patient demographics:

- Medical Record Number (Baby)
- Patient's Name (Baby).
- Gender
- Laboratory test – Cord G6PD
- Badge Number of the person who collected the sample
- Date and Time of Collection
- Handwritten MRN of the Mother

## Specimen Labeling for HLA Compatibility testing

✓ For **Inpatients:**

blood specimen collected for HLA Compatibility testing must be labeled handwritten at the patient's bedside right after the collection. The two identifiers (i.e. Medical Record number and Patient's Full Name) must be present in the handwritten label.

✓ For **Outpatients:**

blood specimen collected for pre transfusion must be immediately labeled with a BestCare barcode label after blood sample collection and handwritten labels are unnecessary.

✓ All blood specimen collected for HLA Compatibility testing must undergo "SAMPLING" in the BESTCare system. The BESTCare barcode label containing the same patient information and badge number of the person labeling the sample will then be affixed to the specimen container.

## 14. METHODS OF SAMPLE TRANSPORTATION TO THE RECEIVING SECTION.

The **TWO** methods of sample transportation within the hospital:

- 1) Handheld
- 2) Pneumatic System

***\*NOTE: All samples brought to the laboratory with any deficient mandatory information will be rejected or sent back to its location.***

### SAMPLES THAT **CAN** BE SENT VIA PNEUMATIC TUBE SYSTEM:

- Blood specimens in evacuated containers
- Urine and stool specimens in small plastic containers
- All culture swabs for Microbiology
- Blood culture bottles

### SAMPLES THAT **CANNOT** BE SENT VIA PNEUMATIC TUBE SYSTEM ( HANDHELD ) :

- H1N1 swabs and other highly infectious samples
- Blood specimens for TYPE and SCREEN (ABORH), DAT BLANK and TRANSFUSION REACTION
- Histopathology samples
- Pap's smear
- Body Fluids (CSF, Ascitic, Pleural, Peritoneal, Synovial)
- MERS-COV samples (swab, sputum, tracheal aspirate, blood)
- Blood samples for platelet aggregation and platelet function test

## 15. REASONS FOR SPECIMEN REJECTION

- Unlabeled specimens
- Mislabeled specimens
- Clotted sample
- QNS (Quantity not sufficient)
- Wrong transportation (e.g. not transported with ice or not covered with foil)
- Spilled sample
- Wrong sample
- Wrong tube/container

## 16. IRRETRIEVABLE SAMPLES

These are samples that are difficult to re-collect, hence should be taken carefully before sending to the laboratory.

1. BODY FLUIDS (CSF, ASCITIC, PLEURAL, SYNOVIAL, PERITONEAL, etc.)
2. HISTOPATHOLOGY SAMPLES (TISSUES)
3. PAP'S SMEAR
4. CORD BLOOD

A Corrective Sample Form (for IRRETRIEVABLE samples) must be filled in by the nurse or the person accountable of the discrepancy before re-labeling unlabeled,



mislabeled, or any label inaccuracies (i.e. missing letter or missing number) noted on the irretrievable samples. Consequently, SRS must be generated.

**BODY FLUIDS are obtained only by authorized physician, types are enumerated below:**

- a) **Pleural**
- b) **Pericardial**
- c) **Ascitic**
- d) **Peritoneal**
- e) **Synovial**
- f) **CSF (Cerebrospinal Fluid )**

**COLLECTION CONTAINERS:**

- ✓ Sterile containers or sterile tubes with no additive for CSF and other fluid examinations except synovial fluid cell count.
- ✓ Synovial fluids for cell count should be anticoagulated in **EDTA** tube or **HEPARIN** tube.

***\*\*NOTE: In order to avoid delaying the process and/or contaminating the specimens please submit 3 separate body fluid receptacles containing 2-3 ml of each fluid.***

## **17. HISTOPATHOLOGY AND CYTOLOGY SAMPLES**

### **COLLECTION OF SPECIMENS**

- Samples are obtained only by authorized physician of the patient.
- Specimens collected from multiple sites should be collected in separate vials/slides with the specimen source identified.
- All samples collected must be ordered only by an authorized physician and **“SAMPLING”** is performed electronically via BESTCare prior sending of the specimens to the laboratory. It is imperative that all samples sent to the laboratory must contain all the following information in the system:
  - 1) **patient’s clinical information**
  - 2) **specimen details, such as:**

- Site of collection (specimen source)
- Date and time the sample is collected
- Badge number of the person who collected the sample
- Type of sample collected
- Number of samples that will be submitted
- Fixative used (if applicable)

## COLLECTION CONTAINERS

- Fluid samples for non-gynecological cytology are collected in sterile containers.
- Gynecological samples are collected in Pap smear containers with prepared fixatives.
- Fresh tissue samples for frozen sections are collected in a sterile container.
- Tissue samples for biopsy are collected in sterile containers with prepared concentration of formalin.

## SPECIMEN LABELING GUIDELINES

- ✓ Specimen containers should be labeled immediately after collection. This include two identifiers (medical record number and patient's name) together with the badge number of the physician who collected the sample, date and time of collection and the type of specimen collected.
- ✓ All samples from VIP, STAT samples, and fresh frozen sections must be coordinated to the Cytology and Histopathology division on-call.

***\*\*NOTE: All samples for Histopathology and Cytology must be submitted directly to the RECEPTION AREA of Histopathology and Cytology during working hours 0800-1700 weekdays (Sunday-Thursday). After 1700 and during weekends (Friday – Saturday), samples must be submitted to the Receiving Laboratory.***

## 18. SAMPLE INTEGRITY

- **PROTHROMBIN TIME (PT)**  
Container must remain closed at room temperature until test is performed. Test must be performed within 4 hours after collection.
- **PARTIAL THROMBOPLASTIN TIME/ACTIVATED THROMBOPLASTIN TIME (PT/PTT)**  
Test must be performed within 2 hours after collection
- **COMPLETE BLOOD COUNT (CBC)**  
Samples are refrigerated for 7 days.
- **URINALYSIS**  
Specimen should be delivered to the lab within 1 hour from collection. It is a CAP requirement that urinalysis be performed within 2 hours of collection.

**\*NOTE:** All samples for urine analysis and urine culture that are not processed within one hour must be placed in the refrigerator until the processing can be performed.

## 19. SPECIMEN COLLECTION PRIORITIES AND TURN AROUND TIME:

Defined as the time delay reasonably expected from the time of receipt of the specimen in the receiving lab to the time when the specimens are given to the sections.

**STAT** – approximately 1 hour

All STAT orders should be collected by the Nurses.

**TIME STUDY** – collected on the exact scheduled time

<b>LIST OF TEST COLLECTED BY PHLEBOTOMISTS IN CASE ORDERED AS <u>TIMED STUDY</u></b>	
Therapeutic Drugs	Vancomycin
	Amykacin
	Gentamycin
Drug Trough Orders	
Drug Peak Orders	
Synacthen Stimulation for Cortisol and ACTH	
Ionized Calcium	
FK 506 or Tacrolimus	
Cyclosporin	
Sirolimus	
Heparin Protocol or Coagulation Profile	
Insulin and Growth Hormone Stimulation	

**ROUTINE** – approximately 6-8 hours

Please observe schedules of Cut-off time for Order Entry and Blood Collection Rounds Time of the Phlebotomists, for the Main Hospital and KASCH

<b>Main Hospital</b>		<b>KASCH</b>	
Cut-off Time for Order Entry	Blood Collection Rounds Time	Cut-off Time for Order Entry	Blood Collection Rounds Time
04:30 H	05:00 H	04:30 H	05:00 H
09:30 H	10:00 H	06:30 H	07:00 H
12:30 H	13:00 H	14:30 H	15:00 H
19:30 H	20:00 H	22:30 H	23:00 H
22:30 H	23:00 H		

## 20. URINE COLLECTION

- ✓ Patients must be clearly informed about the proper collection of 24 hour urine samples. Improperly collected samples yield inaccurate results.
- ✓ Instruct the patient to maintain usual amount of liquid intake.
- ✓ Inform the patient that the urine container must be placed in a cool environment or in the refrigerator if possible during the collection, to prevent growth of microorganisms and possible decomposition of urine constituents.
- ✓ There are a number of foods to be avoided prior to collection of 24 hour urine samples depending on which analyte to be tested.

*\*NOTE: See table below*

**TARIF 4**

TEST NAME	PATIENT PREPARATION
<b>CATECHOLAMINES</b>	Avoid coffee, tea, banana, chocolate, cocoa, citrus fruits and vanilla for two days before the sample collection. If clinical condition allows, it is also recommended that the patient stops taking epinephrine, norepinephrine, dopamine, MAO-inhibitors or catecholamine-reuptake inhibitors at least two days prior to sampling.
<b>Metanephrine</b>	
<b>Normetanephrine</b>	
<b>Vanillylmandelic acid (VMA)</b>	
<b>5-Hydroxy Indoleacetic acid</b>	
<b>CALCIUM</b>	Avoid alcoholic beverages and the patient should be on a regular diet.
<b>MAGNESIUM</b>	Avoid alcoholic beverages and the patient should be on a regular diet.
<b>PHOSPHATE</b>	Avoid alcoholic beverages and the patient should be on a regular diet.
<b>CREATININE</b>	Avoid alcoholic beverages and the patient should be on a regular diet.
<b>OXALATE</b>	Avoid coffee, tea, vitamin C, spinach, chocolate and rhubarb for at least 48 hours before the sample collection.
<b>SODIUM</b>	Avoid alcoholic beverages and the patient should be on a regular diet.
<b>POTASSIUM</b>	Avoid alcoholic beverages and the patient should be on a regular diet.
<b>CHLORIDE</b>	Avoid alcoholic beverages and the patient should be on a regular diet.
<b>PROTEIN</b>	Avoid alcoholic beverages and the patient should be on a regular diet.
<b>COPPER</b>	Avoid alcoholic beverages and the patient should be on a regular diet.

a) RANDOM URINE:



Midstream Clean-catch urine

**b) 24 HOUR URINE:**

- It is advisable to start the collection early morning
- Patients must be informed and be provided with a written proper collection procedure for 24hr urine.
- Instruct the patient to maintain usual amount of liquid intake and avoid alcoholic beverage
- During collection, inform the patient that the urine container must be placed in a cool environment or in the refrigerator to prevent growth of microorganisms and possible decomposition of urine constituents
- In the morning, the patient must empty his/her bladder into the toilet (whether or not he/she feel the need). The first time he/she urinate, urine must NOT be collected and saved. Fill in the start date and time on the bottle.
- Every time the patient urinate thereafter should be collected and transferred into the storage container
- Each time the patient urinates; urine must be collected and transferred to the 24hr urine container then return to the refrigerator or in its cold storage.
- Precisely 24hrs after starting the urine-collection test, patient should urinate one more time.
- The last collected urine must be transferred into the storage container.

## **21. KASCH – LABORATORY**

The Department of Pathology and Laboratory Medicine – KASCH ensures that the best available laboratory services will be provided. Concentrating not only on pediatric care, but as well as the high quality standards of diagnosis and treatment for adult oncology patients. A comprehensive routine clinical laboratory test menu is available 24 hours in the following sections:

- ◆ Phlebotomy services and Specimen Receiving section
- ◆ Chemistry Section
- ◆ Hematology and Coagulation Section
- ◆ Blood Bank – Transfusion Medicine Services
- ◆ Urinalysis and Microscopy

The facility have separate Outpatient phlebotomy areas for adult and pediatric patients to better facilitate the smooth work-flow. This aims to minimize the delay in any process. The KASCH-Outpatient area operates in the following schedule:

Sunday through Thursday : Opens from 0700am till 1700h (0500pm)

Saturday : Opens from 0700am till 1100am only

## **ORDERABLE PANELS and its CONTENTS**

PANELS	CONTENT
<b>ACTH + Cortisol Stimulation Test</b>	ACTH Stimulation Test Cortisol Timed Study
<b>ACTH Stimulation Test</b>	ACTH Baseline ACTH 30min ACTH 60min ACTH 90min ACTH 120min
<b>Anemia Careset</b>	CBC Ferritin Blood Smear Hemoglobin Electrophoresis
<b>Bone Panel</b>	Alkaline Phosphatase Albumin Level Calcium Level Total Phosphorus Level
<b>BUN Panel (HDU)</b>	BUN Arterial BUN Venous BUN Peripheral
<b>CBU Panel</b>	Hemoglobin Electrophoresis HIV Antigen/Antibody HTLV I/II Hepatitis C Antibody Hepatitis B Surface Antigen Hepatitis B Core Total Antibody Syphilis Total Antibody C Blood C Blood ABO-Rh HLA Class I & Class II Molecular Typing (BMT) CMV Antibody NAT-Cord
<b>Coagulation Profile</b>	PT PTT
<b>Cord CBC Careset</b>	G6PD Qualitative CBC+Diff
<b>Cortisol Timed Study</b>	Cortisol Baseline Cortisol 30 Mins Cortisol 60 Mins Cortisol 90 Mins Cortisol 120 Mins
<b>Glucose 2 Hour Post Prandial Careset</b>	Glucose Fasting Glucose 2 Hour Post Prandial
<b>Glucose Stimulation Test</b>	Glucose Baseline Glucose at 30 Mins Glucose at 60 Mins Glucose at 90 Mins Glucose at 120 Mins Glucose at 180 Mins
<b>Glucose Tolerance Test 100g 3 Hours</b>	Glucose Fasting Glucose Tolerance Test 100g 1st Hr Glucose Tolerance Test 100g 2nd Hr Glucose Tolerance Test 100g 3rd Hr

PANELS	CONTENT
<b>Glucose Tolerance Test 75g 2 Hours</b>	Glucose Fasting Glucose Tolerance Test 75g 2 Hrs
<b>Growth Hormone and Glucose Stimulation</b>	Growth Hormone Stimulation Test Glucose Stimulation Test
<b>Growth Hormone Stimulation Test</b>	Growth Hormone Baseline Growth Hormone 30 Mins Growth Hormone 45 Mins Growth Hormone 60 Mins Growth Hormone 90 Mins Growth Hormone 120 Mins Growth Hormone 150 Mins Growth Hormone 180 Mins
<b>Haemodialysis Panel</b>	HIV Antigen/Antibody Hepatitis C Antibody Hepatitis B Surface Antigen Hepatitis B Core Total Antibody Hepatitis B Surface Antibody HTLV I/II Syphilis Total Antibody Quantiferon-TB Gold
<b>HDU1C</b>	Calcium Level Ionized Total Cholesterol Ferritin CBC Glucose Fasting BUN Creatinine Level Sodium Level Chloride Level CO2 Level ALT AST Bilirubin Total ALK (HDU) K (Haemodialysis) Phos (Haemodialysis) Ca (Haemodialysis)
<b>HDU3C</b>	Calcium Level Ionized Total Cholesterol Magnesium Level Iron Level TIBC Ferritin CBC iPth Glucose Fasting BUN Creatinine Level Sodium Level Chloride Level CO2 Level ALT AST Bilirubin Total Ca (Haemodialysis) Phos (Haemodialysis) ALK (HDU) K (Haemodialysis)

## ORDERABLE PANELS and its CONTENTS

PANELS	CONTENT
<b>HDU6C</b>	Calcium Level Ionized CPK Iron Level TIBC Ferritin iPTH CBC Hepatitis C Antibody Hepatitis B Surface Antibody Hepatitis B Surface Antigen Hepatitis B Core Total Antibody Glucose Fasting BUN Creatinine Level Sodium Level Chloride Level CO2 Level ALT AST Bilirubin Total Cholesterol Total Cholesterol HDL Cholesterol LDL Triglycerides K (Haemodialysis) ALK (HDU) Ca (Haemodialysis) Phos (Haemodialysis)
<b>Kidney Donor</b>	CBC Malaria Smear PT/PTT Sickle Cell Solubility Test Calcium Level Total Phosphorus Level Magnesium Level Uric Acid Bilirubin Direct Lactate Dehydrogenase Hepatitis B Surface Antigen Hepatitis B Surface Antibody Hepatitis B Core Total Antibody Hepatitis C Antibody Rubella Antibody IgG Rubella Antibody IgM Syphilis Total Antibody Brucella Antibody Epstein Barr Screen Herpes Simplex Virus Type I/II Screen Varicella Zoster Antibody IgG Varicella Zoster Antibody IgM CMV Antibody Schistosoma Antibody HIV Antigen/Antibody Blood Culture Glucose Random BUN Creatinine Level Sodium Level Potassium Level Chloride Level CO2 Level Alkaline Phosphatase AGAP ALT AST Bilirubin Total

PANELS	CONTENT
<b>HDU3S</b>	HIV Antigen/Antibody HTLV I/II Hepatitis C Antibody Hepatitis B Surface Antigen Hepatitis B Surface Antibody Hepatitis B Core Total Antibody
<b>Kidney Donor Cadaver</b>	HLA CDC Crossmatch HLA Class I & Class II Molecular HBV Panel Hepatitis C Antibody CMV Antibody Rubella Antibody IgG Rubella Antibody IgM HIV Antigen/Antibody Schistosoma Antibody Varicella Zoster Antibody IgG Varicella Zoster Antibody IgM HSV I/II IgM EBV Syphilis Total Antibody Sickle Cell Solubility Test Brucella Antibody IgG & IgM ABO-Rh CBC P2 P3 P4 Blood Culture
<b>Liver Donor Cadaver</b>	CRP (RY) Schistosoma Antibody HTLV I/II HBV Panel CMV Antibody HIV Antigen/Antibody Schistosoma Antibody EBV Syphilis Total Antibody Syphilis IgM Antibody ABO-Rh CBC Lupus Anticoagulant Protein C Activity Protein S Activity Activated Protein C Resistance P1 P3 P4 P7 AFP CEA Blood Culture
<b>Liver Function Panel</b>	Albumin Level Alkaline Phosphatase ALT AST Bilirubin Total
<b>MTU Panel</b>	HIV Antigen/Antibody HTLV I/II Hepatitis B Surface Antigen Hepatitis B Core Total Antibody Syphilis Total Antibody CMV Antibody NAT-Cord Hepatitis C Antibody

## ORDERABLE PANELS and its CONTENTS

PANELS	CONTENT
<b>Liver Donor RY</b>	CBC PT/PTT Activated Protein C Resistance Lupus Anticoagulant Antithrombin III Assay Protein C Activity Protein S Activity Calcium Level Total Phosphorus Level Uric Acid BUN AFP CA 19-9 CEA Creatinine Level Sodium Level Potassium Level Chloride Level CO2 Level AGAP Alkaline Phosphatase ALT AST Bilirubin Total Cholesterol Total HDL LDL Triglycerides CRP (RY) Schistosoma Antibody Hepatitis B Surface Antibody Hepatitis B Surface Antigen Hepatitis C Antibody HIV Antigen/Antibody Syphilis Total Antibody CMV Antibody Epstein Barr Screen Hepatitis B Core Total Antibody
<b>Needle Stick Panel</b>	HIV Antigen/Antibody Hepatitis C Antibody Hepatitis B Surface Antigen Hepatitis B Surface Antibody Hepatitis B Core Total Antibody
<b>Nutrition Panel</b>	Glucose Random BUN Creatinine Level Calcium Level Total Sodium Level Potassium Level Chloride Level Carbon Dioxide Level Alkaline Phosphatase Total Protein ALT AST Cholesterol Total GGT Magnesium Level Triglycerides Phosphorus Level Bilirubin Total

PANELS	CONTENT
<b>Oligoclonal Bands</b>	Oligoclonal Bands Serum Oligoclonal Bands CSF
<b>Organ Transplant (RY)</b>	HIV Antigen/Antibody Hepatitis C Antibody Hepatitis B Surface Antigen Hepatitis B Core Total Antibody HTLV I/II Hepatitis B Surface Antibody Syphilis Total Antibody Hepatitis A Antibody CMV Antibody Brucella Antibody Herpes Simplex Virus Type I/II Screen Toxoplasma Antibody Varicella Zoster Antibody IgG Rubella Antibody IgG Epstein Barr Screen
<b>P1 Basic Screen, Fasting * Requires 8 – 10 Hours Fasting</b>	<b>Fasting</b> Glucose Blood Urea Nitrogen ( BUN ) Creatinine Chloride Carbon Dioxide ( CO2 ) Potassium Sodium
<b>P2 Basic Screen, Random / Non-fasting</b>	<b>Random</b> Glucose Blood Urea Nitrogen ( BUN ) Creatinine Chloride Carbon Dioxide ( CO2 ) Potassium Sodium
<b>P3 Renal Function Test</b>	Albumin Alkaline Phosphatase Calcium Adjusted Calcium Magnesium Phosphorus Uric Acid
<b>P4 Liver Function Test</b>	Alkaline Phosphatase AST ( SGOT ) ALT ( SGPT ) Bilirubin, Total Protein, Total
<b>P5 Cardiac Enzymes</b>	AST ( SGOT ) Creatine Kinase, Total ( CK ) Creatine Kinase-MB ( CK -MB ) LDH Troponin-I
<b>P7 Lipid Profile or Coronary Risk Profile * Requires 9 – 12 Hours Fasting</b>	Cholesterol HDL LDL Triglyceride

## ORDERABLE PANELS and its CONTENTS



PANELS	CONTENT
<b>P6 TPN profile</b>	Random Glucose Albumin Alkaline Phosphatase AST ( SGOT ) ALT ( SGPT ) Blood Urea Nitrogen ( BUN ) Creatinine Calcium Adjusted Calcium Cholesterol Chloride Carbon Dioxide ( CO2 ) Gamma-glutamyl Transferase ( GGT ) Sodium Potassium Magnesium Phosphorus Triglyceride Protein, Total ( TP ) Bilirubin, Total
<b>Pediatric panel</b>	Creatinine Level Sodium Level Potassium Level BUN Phosphorus Level Magnesium Level Calcium Level Total Bilirubin Total
<b>Pre Marriage Screen</b>	HIV Antigen/Antibody Hepatitis B Surface Antigen Hepatitis C Antibody Syphilis Total Antibody CBC + Diff Sickle Cell Solubility Test Hemoglobin Electrophoresis
<b>Prenatal Screen (RY)</b>	Glucose Random Sodium Level Potassium Level BUN Chloride Level CBC Hepatitis B Surface Antigen Hepatitis B Surface Antibody Hepatitis B Core Total Antibody Hepatitis C Antibody Rubella Antibody IgG Carbon Dioxide Level Creatinine Level Syphilis Total Antibody
<b>Puberty F</b>	Glucose Random Lipid Panel C-Peptide Insulin Level Total LH FSH Level E2

PANELS	CONTENT
<b>Puberty M</b>	Glucose Random Lipid Panel C-Peptide Insulin Level Total LH FSH Level Testosterone Level Total
<b>Recirculation</b>	BUN Arterial BUN Peripheral BUN Venous
<b>Renal Function Panel</b>	Albumin Level Calcium Level Total Creatinine Level Phosphorus Level BUN Uric Acid Magnesium Level
<b>Short Synacthen Test</b>	Cortisol Baseline Cortisol 30 Mins Cortisol 60 Mins
<b>Stem Cell and Cord Blood Careset</b>	HIV Antigen/Antibody Hepatitis C Antibody Hepatitis B Surface Antigen Hepatitis B Core Total Antibody HTLV I/II Hepatitis B Surface Antibody Syphilis Total Antibody
<b>Synacthen Stimulation Test</b>	ACTH Baseline Cortisol Baseline Cortisol 60 Mins Cortisol 120 Mins Cortisol 180 Mins Cortisol 240 Mins Cortisol 300 Mins
<b>Thrombophilia Screening</b>	Protein C Activity Protein S Activity Antithrombin III Assay Lupus Anticoagulant Activated Protein C Resistance
<b>Thyroid Panel</b>	Thyroid Stimulating Hormone ( TSH ) Free thyroxine ( FT4 )
<b>Thyroid Stimulating Hormone Time Study</b>	TSH Baseline TSH 20 mins TSH 60 mins

## DEFINITION OF TERMS or TEST SYNONYMS

TERMS	DEFINITION
<b>( AG )</b>	Antigen
<b>( P )</b>	Plasma
<b>( S )</b>	Serum
<b>( U )</b>	Urine
<b>( U ) 24 HOURS</b>	Urine 24 Hours
<b>( U ) RANDOM</b>	Random Urine or Spot Urine
<b>5-HIAA</b>	5-Hydroxy Indole Acetic Acid
<b>A-1 Antitrypsin</b>	Alpha-1 Antitrypsin
<b>AB</b>	Antibody
<b>ACA AB</b>	Anti-Cardiolipin Antibody
<b>ACD</b>	Acid Citrate Dextrose
<b>ACTH</b>	Adrenocorticotrophic hormone
<b>AFP</b>	Alpha Feto Protein
<b>ALL</b>	Acute Lymphocytic Leukemia
<b>ALT</b>	Alanine Aminotransferase
<b>AMA</b>	Anti-Mitochondrial Antibody
<b>ANA</b>	Anti-Nuclear Antibody
<b>ANCA</b>	Anti-Neutrophilic Cytoplasmic Antibody
<b>Anti-CCP</b>	Anti- Cyclic Citruline Peptide
<b>Anti-GBM</b>	Anti-Glomerular Basement Membrane
<b>Anti-La</b>	Anti-SSB
<b>Anti-Ro</b>	Anti-SSA
<b>ASMA</b>	Anti-Smooth Muscle Antibody
<b>ASOT</b>	Anti-Streptolysin O Titer
<b>AST</b>	Aspartate Aminotransferase
<b>B2G</b>	Beta - 2 Glycoprotein

TERMS	DEFINITION
<b>B2M</b>	Beta - 2 Microglobulin
<b>BAL</b>	Broncho-Alveolar Lavage
<b>Beta HCG</b>	Beta Human Chorionic Gonadotropin
<b>BML</b>	Basic Metabolic Lab
<b>BNP</b>	Brain-type Natriuretic Peptide
<b>BUN</b>	Blood Urea Nitrogen or Urea Nitrogen
<b>C, DIFF</b>	Clostridium Difficile
<b>C3</b>	Complement 3
<b>C4</b>	Complement 4
<b>CDT</b>	Carbohydrate Deficiency Transferrin
<b>CEA</b>	Carcinoembryonic Antigen
<b>CK</b>	Creatine Kinase
<b>CK-MB</b>	Creatine Kinase - MB
<b>CML</b>	Chronic Myelogenous Leukemia
<b>CMV</b>	Cytomegalo Virus
<b>CO2</b>	Carbon Dioxide
<b>CRP</b>	C-Reactive Protein
<b>CSF</b>	Cerebrospinal Fluid
<b>DHEAS</b>	Dehydroepiandrosterone Sulfate
<b>DMD</b>	Duchenne Myotonic Dystrophy
<b>DsDNA</b>	Double-Stranded DNA
<b>EBNA</b>	Epstein Barr Virus Nuclear-Antigen
<b>EBV</b>	Epstein Barr Virus
<b>EBV-EA</b>	Epstein Barr Virus Early-Antigen
<b>ESR</b>	Erythrocyte Sedimentation rate
<b>FK56</b>	Tacrolimus

## DEFINITION OF TERMS or TEST SYNONYMS

TERMS	DEFINITION
<b>FSH</b>	Follicle Stimulating Hormone
<b>FT3</b>	Free Triiodothyronine
<b>FT4</b>	Free Thyroxine
<b>GAD</b>	Glutamate Decarboxylase
<b>GGT</b>	Gamma Glutamyl Transferase
<b>GPA</b>	Gastric Parietal Cell Antibody
<b>HBV</b>	Hepatitis B Virus
<b>HCV</b>	Hepatitis C Virus
<b>HGB Elect</b>	Hemoglobin Electrophoresis
<b>HLA</b>	Human Leukocyte Antigen
<b>HSV</b>	Herpes Simplex Virus
<b>HTG</b>	Anti-Thyroglobulin Antibody
<b>HTLV</b>	Human T-Lymphocyte Virus
<b>HTTG</b>	Human Tissue Transglutaminase Antibody
<b>HVA</b>	Homovanilic Acid
<b>IFE</b>	Immunofluorescence Electrophoresis
<b>IgA</b>	Immunoglobulin A
<b>IGF-1</b>	Insulin Growth Factor-1
<b>IgG</b>	Immunoglobulin G
<b>IGH</b>	Immunoglobulin Heavy Chain
<b>IgM</b>	Immunoglobulin M
<b>iPTH</b>	Intact Parathyroid Hormone
<b>L/K MICROSOMAL AB</b>	Liver/Kidney Microsomal Antibody
<b>MBL</b>	Molecular Biological Lab
<b>MML</b>	Molecular Microbiological Lab
<b>MSUD</b>	Maple Syrup Urine Disease
<b>MTHFR</b>	Methylene TetrahydroFolate Reductase

TERMS	DEFINITION
<b>NBS</b>	Newborn Screening
<b>NPA</b>	Nasopharyngeal Aspirate
<b>NPM1</b>	Nucleophosmin
<b>NPS</b>	Nasopharyngeal Swab
<b>PCR</b>	Polymerase Chain Reaction
<b>PET</b>	Parafilm Embedded tissue
<b>PFA</b>	Platelet Function Assay
<b>PNH</b>	Paroxysmal Nocturnal Hemoglobinuria
<b>PRA</b>	Panel Reactive Antibody
<b>RPR</b>	Rapid Plasma Reagin
<b>SGOT</b>	Other term for <b>AST</b>
<b>SGPT</b>	Other term for <b>ALT</b>
<b>SNRP-PWS</b>	SNRP-Prader Willi Syndrome
<b>SPE</b>	Serum Protein Electrophoresis
<b>SST</b>	Serum Separator Tube
<b>TANDEM MS</b>	Tandem Mass Spectrophotometry
<b>TAT</b>	Turnaround Time
<b>TPO</b>	Anti-Thyroid Peroxidase Antibody
<b>TSH</b>	Thyroid Stimulating Hormone
<b>UAR</b>	Urinalysis
<b>UVTM</b>	Universal Viral Transport Media
<b>VDRL</b>	Venereal Disease Research Lab
<b>VMA</b>	Vanillylmandelic Acid
<b>VW Ag</b>	Von Willibrand Factor Antigen
<b>VZV</b>	Varicella Zoster Virus
<b>WES</b>	Whole Exon Sequencing

## 24. IN-HOUSE LABORATORY TEST LIST

In this table, “**Test names**” are arranged alphabetically for easy search of the assays in quest. To intercept insufficiency in quantity or inaccuracy in the sample to be collected and subsequent supplementary specimen to be necessitated, everybody must observe and adhere in the conditions set by each section analyzing the specimen. Conditions such as *Minimum blood requirements* –for adult and pediatric patients–, *Collection tubes to use*, *Necessary number of collection tubes to prepare*, *Appropriate Type of Collection Material*, and lastly, “*Section Provisions*” **Pink boxes** be learned prior specimen collection.

It is also imperative that “**Sample Type**” is properly identified. Other tests may require a number of rarely collected samples like Body Fluids (i.e. **Pleural, Pericardial, Ascitic, Peritoneal, and Synovial**), CSF, **Broncho-Alveolar Lavage (BAL)**, **Nasopharyngeal Swab (NPS)**, **Nasopharyngeal Aspirate (NPA)**, and **Tracheal Aspirate** which may appear alike. Therefore, the collector is obliged to specify the specimen details (i.e. Fluid type, Collection site, Date&Time of collection, and the Collector’s Badge) to avoid uncertainty in defining the type of samples necessary for processing thru analysis.

Moreover, “**Sections**” and “**Testing Location**” is laid out to inform the reader regarding particular contacts (extensions and the person in-charge) in case further queries, specific instructions or availability of tests in certain areas, whether STAT LAB, CENTRAL LAB, KAMC or KASCH. In this case, ample time will be allotted for sending specimen to each of the mentioned areas, most especially to those with Cut-Off time. This includes the time the sample is procured, delivery to respective receiving areas and transportation to testing locations.

Lastly, apart from the tests enumerated in the test list below, other tests unsearchable are sent outside to Referral Laboratories (i.e. **Bioscientia** and **KFSH**). Referred tests are available online through the following link:

<http://kamc-r.ngha.med/department/riyadh/laboratory/sendout/index.html> )

## TEST LIST 2017



**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
ACTIVATED T-CELL CD69 PANEL	1 ml EACH	2 ml EACH	EDTA (purple) + Na Heparin (green)	WHOLE BLOOD	FLOWCYTOMETRY	CENTRAL LAB
	<p><u>PRE-BOOKED</u> through phone <u>PRIOR SPECIMEN COLLECTION</u>.</p> <p><u>Testing</u> Should be performed <u>within 24 hours</u> of Collection.</p> <p>Store/Transport Specimen at <u>ROOM Temperature</u></p> <p>Please call Ext # 54248 or 54249</p> <p><b>**After working hours (beyond 1700 and weekends) Contact through Pager # 1184</b></p>					
ADRENOCORTICOTROPIC HORMONE (ACTH)	1 ml	2 ml	EDTA (purple)	PLASMA	SPECIAL CHEMISTRY	CENTRAL LAB
	TRANSPORTED ON ICE					
ALANINE AMINOTRANSFERASE (ALT)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
ALBUMIN ( U ) (MICROALBUMIN URINE)	1 ml	10 mL	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
ALBUMIN ( S )	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
ALBUMIN ( CSF )	0.5 mL	0.5 mL	STERILE CONTAINER	CSF	ROUTINE CHEMISTRY	KAMC
ALDOSTERONE/RENIN RATIO	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
ALKALINE PHOSPHATASE	0.5 mL	0.5 mL	STERILE CONTAINER	CSF	ROUTINE CHEMISTRY	KAMC
ALPHA FETO PROTEIN (AFP)	2 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
ALPHA THALASSEMIA (HBA1 / HBA2 GENE)	3 ml EACH	6 ml EACH	2 EDTA tubes (purple)	WHOLE BLOOD / BONE MARROW	MBL	KAMC
E - CONSENT FORM NEEDED						
AMIKACIN PEAK – drawn 30 minutes after the infusion	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH and KAMC
DRAWN ON THE EXACT SCHEDULED TIME						
AMIKACIN TROUGH – drawn within 30 minutes prior to next dose	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH and KAMC
DRAWN ON THE EXACT SCHEDULED TIME						
AMINO ACID (PLASMA)	0.5 ml	0.5 ml	Li Heparin (green)	PLASMA	BML	KAMC
COLLECT BLOOD 8 HOURS AFTER MEAL						
AMINO ACID (U)	10 ml	10 ml	STERILE CONTAINER	URINE	BML	KAMC
AMMONIA	1 ml	3 ml	Na Heparin (green)	PLASMA	ROUTINE CHEMISTRY	KASCH and KAMC
TRANSPORTED ON ICE						
AMPHETAMINE/METHAMPHETAMINE (U) - included in TOX Screen Panel	10 ml	10 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
AMYLASE (S)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
AMYLASE (U)	5 ml	5 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
ANA-F	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
ANTI-CARDIOLIPIN ANTIBODY (ACA AB) or ANTI-PHOPHOLIPIDS	2 ml	7 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
ANTI-CCP IgG ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
ANTI-ENDOMYSIAL ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
ANTI-GLIADIN IgA	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
ANTI-GLIADIN IgG	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
ANTI-GLOMERULAR BASEMENT MEMBRANE (GBM)	2 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
ANTI-ISLET CELL AUTOANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
ANTI-JO 1 ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
ANTI-LIVER/KIDNEY MICROSOMAL ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
ANTI-MITOCHONDRIAL ANTIBODY (AMA)	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
ANTI-MULLERIAN HORMONE (A M H)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	CENTRAL LAB
ANTI-NATIVE DEOXYRIBONUCLEIC ACID (DNA)	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
ANTI-NEUTROPHILIC CYTOPLASMIC AB (C&P ANCA)	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
ANTI-NUCLEAR ANTIBODY (ANA)	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
ANTI-PHOSPHOLIPIDS or ANTI-CARDIOLIPIN ANTIBODY (ACA AB)	2 ml	7 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
ANTI-RNP ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
ANTI-SCL 70 ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
ANTI-SMITH ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
ANTI-SMOOTH MUSCLE ANTIBODY (ASMA)	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
ANTI-SS-A ANTIBODY (ANTI-RO)	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
ANTI-SS-B ANTIBODY (ANTI-LA)	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
ANTI-STREPTOLYSIN O (ASOT)	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
ANTI-THROMBIN III	2 ml	3.5 ml	Na Citrate (blue)	PLASMA	COAGULATION	KAMC
	<b>SEND to coagulation section IMMEDIATELY</b>					
ANTI-THYROGLOBULIN AB (htg)	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
ANTI-THYROID PEROXIDASE AB (TPO)	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
ASPARTATE AMINOTRANSFERASE (AST)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB



**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to [pages 7 to 11](#)**  
**Orderable Panels and its Contents please refer to [page 30 to 33](#)**  
**Definition of terms / Test Synonyms please refer to [page 34 to 35](#)**  
**Section Contact Numbers (Extension Numbers) please refer to [page 96](#)**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to [page 75](#) for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
ASPERGILLUS GALACTOMANNAN (AG) ANTIGEN ( BAL )	2 ml	2 ml	STERILE CONTAINER	BAL BRONCHO-ALVEOLAR LAVAGE	MOLECULAR MICROBIOLOGY	KAMC
	Samples are processed on <u>SUNDAYS</u> and <u>TUESDAYS ONLY</u> , during working hours					
	Working hours: Daily 0700H to 1600H					
ASPERGILLUS GALACTOMANNAN (AG) ANTIGEN ( S )	2 ml	2 ml	PLAIN TUBE ( RED top W/O GEL )	SERUM	MOLECULAR MICROBIOLOGY	KAMC
	Samples are processed on <u>SUNDAYS</u> and <u>TUESDAYS ONLY</u> , during working hours					
	Working hours: Daily 0700H to 1600H					

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
B - LYMPHOCYTE PANEL	1 ml EACH	2 ml EACH	EDTA (purple) + Na Heparin (green)	WHOLE BLOOD	FLOWCYTOMETRY	CENTRAL LAB
	<p><u>PRE-BOOKED</u> through phone <u>PRIOR SPECIMEN COLLECTION</u>.</p> <p><u>Testing</u> Should be performed <u>within 48 hours</u> of Collection.</p> <p>Store/Transport Specimen at <u>ROOM Temperature</u></p> <p>Please call Ext # 54248 or 54249</p> <p><b>**After working hours (beyond 1700 and weekends)</b></p> <p>Contact through <b>Pager # 1184</b></p>					
B2-MICROGLOBULIN	1 ml	3 ml	SST (yellow)	SERUM	SPECIAL CHEMISTRY	KAMC
BARBITURATES ( U ) - included in TOX Screen Panel	10 ml	10 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
BCL1 – TRANSLOCATION ASSAY	PET or 6 ml	PET or 6 ml	PET or 1 EDTA tube (purple)	PET/ WHOLE BLOOD	MBL	KAMC
BCL2 – TRANSLOCATION ASSAY	PET or 6 ml	PET or 6 ml	PET or 1 EDTA tube (purple)	PET/ WHOLE BLOOD	MBL	KAMC
BCR/ABL P190 (ALL)	3 ml	6 ml	2 EDTA tubes (purple)	WHOLE BLOOD or BONE MARROW	MBL	KAMC
	TRANSPORTED ON ICE					
BCR/ABL P210 (CML)	3 ml EACH	6 ml EACH	2 EDTA tubes (purple)	WHOLE BLOOD or BONE MARROW	MBL	KAMC
	TRANSPORTED ON ICE					

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to [pages 7 to 11](#)**  
**Orderable Panels and its Contents please refer to [page 30 to 33](#)**  
**Definition of terms / Test Synonyms please refer to [page 34 to 35](#)**  
**Section Contact Numbers (Extension Numbers) please refer to [page 96](#)**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to [page 75](#) for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
BENCE JONES PROTEIN (U) 24 HOUR	10 ml	10 ml	STERILE CONTAINER	URINE	BML	KAMC
BENZODIAZEPINES ( U ) - Included in TOX Screen Panel	10 ml	10 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
BETA 2 GLYCOPROTEIN ( IgA, IgM, IgG )	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
BETA HCG	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC and STAT LAB
BETHESDA	2 ml (3 TUBES)	3.5 ml (3TUBES)	Na Citrate (blue)	PLASMA	COAGULATION	KAMC
BILE ACIDS, TOTAL	2 ml	3 ml	SST (yellow)	SERUM	SPECIAL CHEMISTRY	KAMC
BILIRUBIN, DIRECT	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
BILIRUBIN, NEONATAL	1 ml	N/A	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
BILIRUBIN, TOTAL	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
BINDING PROTEIN 3 (BP3)	1 ml	2 ml	SST (yellow)	SERUM	SPECIAL CHEMISTRY	CENTRAL LAB
BLOOD CULTURE ( PEDIATRIC )	1ml	N/A	( PEDIATRIC ) BLOOD CULTURE BOTTLE	WHOLE BLOOD	MICROBIOLOGY	KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
BLOOD CULTURE ( AEROBIC & ANAEROBIC )	N/A	8ml	( AEROBIC & ANAEROBIC ) BLOOD CULTURE BOTTLE	WHOLE BLOOD	MICROBIOLOGY	KAMC
BRAIN NATRIURETIC PEPTIDE (BNP)	1 ml	2 ml	EDTA (purple)	PLASMA	ROUTINE CHEMISTRY	KAMC and STAT LAB
BRUCELLA ANTIBODY or BRUCELLA TITER	1 ml	5 ml	SST SERO (BIG yellow)	SERUM/ CSF	SEROLOGY	KAMC
BURST TEST (NEUTROPHIL FUNCTION TEST)	1 ml EACH	2 ml EACH	EDTA (purple) + Na Heparin (green)	WHOLE BLOOD	FLOWCYTOMETRY	CENTRAL LAB
	<p><u>PRE-BOOKED</u> through phone <u>PRIOR SPECIMEN COLLECTION.</u></p> <p><u>Testing</u> Should be performed <u>within 24 hours</u> of Collection.</p> <p>Store/Transport Specimen at <u>ROOM Temperature</u></p> <p>Please call Ext # 54248 or 54249</p> <p><b>**After working hours (beyond 1700 and weekends) Contact through Pager # 1184</b></p>					



**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to [pages 7 to 11](#)**  
**Orderable Panels and its Contents please refer to [page 30 to 33](#)**  
**Definition of terms / Test Synonyms please refer to [page 34 to 35](#)**  
**Section Contact Numbers (Extension Numbers) please refer to [page 96](#)**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to [page 75](#) for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
C FECES (STOOL CULTURE)			STERILE CONTAINER	STOOL	MICROBIOLOGY	KAMC
CA 125	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC
CA 15-3	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC
CA 19-9	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC
CALCIUM (S)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
CALCIUM (U) 24 HOUR	5 ml	5 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
CALCIUM (U) RANDOM	5 ml	5 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
CALCIUM IONIZED	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC
CANNABINIODS ( U ) - included in TOX Screen Panel	10 ml	10 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
CARBAMAZEPINE (TEGRETOL)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH and KAMC
CARBON DIOXIDE	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
CARCINOEMBRYONIC ANTIGEN (CEA)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC
CBC + DIFFERENTIAL	1 ml	3 ml	EDTA (purple)	WHOLE BLOOD	HEMATOLOGY	KASCH and KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
CD34 COUNT	1 ml EACH	2 ml EACH	EDTA (purple) + Na Heparin (green)	WHOLE BLOOD	FLOWCYTOMETRY	CENTRAL LAB
	<p><u>PRE-BOOKED</u> through phone <u>PRIOR SPECIMEN COLLECTION.</u></p> <p><u>Testing</u> Should be performed <u>within 3 hours</u> of Collection.</p> <p>Store/Transport Specimen at <u>ROOM Temperature</u></p> <p>Please call Ext # 54248 or 54249</p> <p><b>**After working hours (beyond 1700 and weekends)</b></p> <p>Contact through <u>Pager # 1184</u></p>					
CD4/CD8 RATIO (BLOOD)	1 ml EACH	2 ml EACH	EDTA (purple) + Na Heparin (green)	WHOLE BLOOD	FLOWCYTOMETRY	CENTRAL LAB
	<p><u>PRE-BOOKED</u> through phone <u>PRIOR SPECIMEN COLLECTION.</u></p> <p>Please call Ext # 54248 or 54249</p> <p><b>**After working hours (beyond 1700 and weekends)</b></p> <p>Contact through <u>Pager # 1184</u></p>					
CD4/CD8 RATIO (BAL)	2 ml	2 ml	STERILE CONTAINER	BAL BRONCHO-ALVEOLAR LAVAGE	FLOWCYTOMETRY	CENTRAL LAB
	<p><u>PRE-BOOKED</u> through phone <u>PRIOR SPECIMEN COLLECTION.</u></p> <p>Please call Ext # 54248 or 54249</p> <p><b>**After working hours (beyond 1700 and weekends)</b></p> <p>Contact through <u>Pager # 1184</u></p>					
CDT	2 ml	2 ml	SST (yellow)	SERUM	BML	KAMC
CENTROMERE ANTIBODY SCREEN	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
CERULOPLASMIN	1 ml	3 ml	SST (yellow)	SERUM	SPECIAL CHEMISTRY	KAMC
CHIMERISM PRE TRANSPLANT **DONOR or RECIPIENT** ( BONE MARROW / STEM-CELL TRANSPLANT )	3 ml EACH + 8 ml EACH	6 ml EACH + 8 ml EACH	3 - 4 EDTA tubes (purple) + 1 ACD tube (yellow glass tube)	WHOLE BLOOD	MBL	KAMC
<b>E - CONSENT FORM NEEDED</b> Requires prior <b>BOOKING</b> before sample collection. Please call <b>EXT # 11680</b> .						
CHLAMYDIA ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
CHLAMYDIA TRACHOMATIS / GONORRHEA PCS ( SWABS )			XPRT CT / NG PINK TOP TUBE	CERVIX / URETHRAL SWAB	MOLECULAR MICROBIOLOGY	KAMC
<b>PROCESSED DAILY</b> during working hours Working hours: Daily 0700H to 1600H ,EXCEPT WEEKENDS <b>RESULTS</b> are available <b>WITHIN A DAY</b> if processed otherwise on the next working day.						
CHLAMYDIA TRACHOMATIS / GONORRHEA PCS (U) RANDOM	10 ml	10 ml	STERILE CONTAINER	URINE	MOLECULAR MICROBIOLOGY	KAMC
<b>PROCESSED DAILY</b> during working hours Working hours: Daily 0700H to 1600H ,EXCEPT WEEKENDS <b>RESULTS</b> are available <b>WITHIN A DAY</b> if processed otherwise on the next working day.						
CHLORIDE (S)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
CHLORIDE (U)	5 ml	5 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to [pages 7 to 11](#)**  
**Orderable Panels and its Contents please refer to [page 30 to 33](#)**  
**Definition of terms / Test Synonyms please refer to [page 34 to 35](#)**  
**Section Contact Numbers (Extension Numbers) please refer to [page 96](#)**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to [page 75](#) for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
CHMERSIM POST TRANSPLANT **RECIPIENT**	3 ml EACH	6 ml EACH	4 EDTA tubes (purple)	WHOLE BLOOD	MBL	KAMC
<p>Requires prior <b>BOOKING</b> before sample collection.</p> <p>Please call <b>EXT # 11680</b>.</p> <p><b>MONDAYS</b> and <b>WEDNESDAYS</b> only.</p> <p><b>CUT-OFF TIME:</b></p> <p>Should reach <b>MBL SECTION</b> in main hospital <b>before 0900H</b></p>						
CHOLESTEROL	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH and KAMC
REQUIRES 9 – 12 HOURS FASTING						
CHROMOSOMAL ANALYSIS	2 ml	3ml	Na Heparin (green)	WHOLE BLOOD	CYTOGENETICS	CENTRAL LAB
CHROMOSOMAL BREAKAGE ANALYSIS or ( CHROMOSOMAL FRAGILITY TEST / FANCONI BREAKAGE STUDY )	3 ml EACH	3 ml EACH	2 Na Heparin tubes (green)	WHOLE BLOOD	MBL	SEND-OUT
<p>Requires prior <b>BOOKING</b> before sample collection.</p> <p>Please call <b>EXT # 11680</b>.</p> <p><b>SUNDAY</b> and <b>TUESDAY</b> only.</p> <p><b>CUT-OFF TIME:</b></p> <p>Should reach <b>MBL SECTION</b> in main hospital <b>before 0900H</b></p>						



**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
CLOSTRIDIUM DIFFICILE PCR			STERILE CONTAINER	STOOL	MOLECULAR MICROBIOLOGY	KAMC
<p>Samples are <b>PROCESSED DAILY</b> during working hours  <b>Working hours: Daily 0700H to 1600H , EXCEPT WEEKENDS</b>  <b>RESULTS</b> are available <b>WITHIN A DAY</b> if processed otherwise on the next working day.</p>						
CMV IgG	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
CMV IgM	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
COCAINE (U) - included in TOX Screen Panel	10 ml	10 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
COLD AGGLUTININS	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
TRANSPORTED IN 37°C						
COMPLEMENT 3	1 ml	3 ml	SST (yellow)	SERUM	SPECIAL CHEMISTRY	KAMC
COMPLEMENT 4	1 ml	3 ml	SST (yellow)	SERUM	SPECIAL CHEMISTRY	KAMC
CONFIRMATORY TEST FOR HEPATITIS B SURFACE ANTIGEN	1 ml	10 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
COPPER	2 ml	2ml	Trace Element tube (Royal Blue)	SERUM	TOXICOLOGY	KAMC
COPPER (U) 24 HOUR	10 ml	10 ml	Trace Element tube (Royal Blue)	24 HR URINE	TOXICOLOGY	KAMC
CORD G6PD	2 ml		EDTA (purple)	WHOLE BLOOD	HEMATOLOGY	KAMC
<p><b>LABELING Requirement:</b>  BestCare Label must be complete without errors or inaccuracies. BestCare label must be affixed properly. Mother's MRN must be included and written legibly.  <b>**Any inaccuracy (e.g. missing letter or missing number) or errors (i.e. Mislabeling or Unlabeled –Patient's NAME, Patient's MRN or Mother's MRN) noted in the Cord blood sample label must be corrected immediately. This is considered an Irretrievable sample, therefore, label corrections must be accompanied by an appropriate documentation and generation of SRS**</b></p>						

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
CORD TSH	1 ml		SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC
	<b>LABELING Requirement:</b> BestCare Label must be complete without errors or inaccuracies. BestCare label must be affixed properly. Mother's MRN must be included and written legibly. <b>**Any inaccuracy (e.g. missing letter or missing number) or errors (i.e. Mislabeling or Unlabeled –Patient's NAME, Patient's MRN or Mother's MRN) noted in the Cord blood sample label must be corrected immediately. This is considered an Irretrievable sample, therefore, label corrections must be accompanied by an appropriate documentation and generation of SRS**</b>					
CORTISOL	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH and KAMC
C-PEPTIDE	2 ml	2 ml	SST (yellow)	SERUM	SPECIAL CHEMISTRY	CENTRAL LAB
C-REACTIVE PROTEIN (CRP)	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
CREATINE KINASE (CK)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
CREATINE KINASE-MB (CK-MB)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
CREATININE (S)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
CREATININE (U)	5 ml	5 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
CROSS MATCHING-CXM DONOR	20ml ACD & 10ml RED Top Or 10ml SST SERO	20ml ACD & 10ml RED Top Or 10ml SST SERO	ACD tube (yellow glass tube) + PLAIN TUBE (red top w/o GEL) Or SST SERO (BIG yellow)	WHOLE BLOOD	HLA	KAMC
IMMEDIATELY SEND TO HLA LAB. TESTING TAKES 8 HOURS						
CROSS MATCHING-CXM RECIPIENT	20ml ACD & 10ml RED Top Or 10ml SST SERO	20ml ACD & 10ml RED Top Or 10ml SST SERO	ACD tube (yellow glass tube) + PLAIN TUBE (red top w/o GEL) Or SST SERO (BIG yellow)	WHOLE BLOOD	HLA	KAMC
IMMEDIATELY SEND TO HLA LAB. TESTING TAKES 8 HOURS						
CRYOGLOBULIN	1 ml	1 ml	PLAIN TUBE (red top W/O GEL)	SERUM	BML	KAMC
TRANSPORTED IN 37°C						
CRYPTOCOCCAL ANTIGEN DETECTION	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
CYCLOSPORIN	3 ml	3 ml	EDTA (purple)	WHOLE BLOOD	ROUTINE CHEMISTRY	KAMC
DRAWN ON THE EXACT SCHEDULED TIME Samples will be <b>PROCESSED SAME DAY IF RECEIVED BEFORE CUT-OFF TIME</b> <b>CUT OFF TIME:</b> KASCH : daily including weekends before 0900H KAMC : daily including weekends before 1030H <b>RESULTS</b> are available <b>WITHIN THE DAY</b> if processed, otherwise on the next working day.						

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to [pages 7 to 11](#)**  
**Orderable Panels and its Contents please refer to [page 30 to 33](#)**  
**Definition of terms / Test Synonyms please refer to [page 34 to 35](#)**  
**Section Contact Numbers (Extension Numbers) please refer to [page 96](#)**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to [page 75](#) for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
CYTOMEGALOVIRUS PCR ( CSF ) (CMV-PCR)	1 ml	1 ml	STERILE CONTAINER	CSF	MOLECULAR MICROBIOLOGY	KAMC
	<p>Samples are processed <b>EVERY MONDAY</b> and <b>THURSDAY ONLY</b></p> <p><b>RESULTS</b> are available within <b>ONE WEEK.</b></p>					
CYTOMEGALOVIRUS PCR ( PLASMA ) (CMV-PCR)	2 ml	2 ml	2 EDTA TUBES (purple)	PLASMA	MOLECULAR MICROBIOLOGY	KAMC
	<p>Samples are processed <b>EVERY MONDAY</b> and <b>THURSDAY ONLY</b></p> <p><b>RESULTS</b> are available within <b>ONE WEEK.</b></p>					



**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
D-DIMER	2ml	3.5ml	Na Citrate (blue)	PLASMA	COAGULATION	KAMC And KASCH
DENGUE IgG & IgM	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
DHEAS	1 ml	2 ml	SST (yellow)	SERUM	SPECIAL CHEMISTRY	CENTRAL LAB
DIGOXIN	1 ml	3 ml	EDTA (purple)	PLASMA	ROUTINE CHEMISTRY	KAMC
DRAWN ON THE EXACT SCHEDULED TIME						
DIRECT COOMB'S TEST (DAT BLANK)	2 ml	3 ml	EDTA (purple)	WHOLE BLOOD	BLOOD BANK TRANSFUSION MEDICINE SERVICES	KAMC And KASCH
<p>Do not send through Pneumatic Capsule.  <b>LABELING Requirement:</b>  <b>For Inpatients:</b> Should be <b>LABELED HANDWRITTEN</b> with the following details:            Patient's MRN            Patient's Name            Badge number of the Person who collected the sample            Date and Time of Sample Collection            and must <b>APPEAR EXACTLY THE SAME</b> as indicated in the BestCare barcode label.  <b>For Outpatients:</b> Affix the BestCare label immediately. No need for handwritten labels but stick the <b>ORANGE STICKER</b> if necessary.            (i.e. Armbanded "Chemo or Oncology Patients")</p>						

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to [pages 7 to 11](#)**  
**Orderable Panels and its Contents please refer to [page 30 to 33](#)**  
**Definition of terms / Test Synonyms please refer to [page 34 to 35](#)**  
**Section Contact Numbers (Extension Numbers) please refer to [page 96](#)**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to [page 75](#) for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
DIRECT COOMB'S TEST (DAT BLANK)  (FOR NEONATES)	1 ml		EDTA (purple)	WHOLE BLOOD	BLOOD BANK  TRANSFUSION MEDICINE SERVICES	KAMC And KASCH
	<p>Do not send through Pneumatic Capsule.  <b>LABELING Requirement:</b></p> <p><b>For Inpatients:</b> Should be <b>LABELED HANDWRITTEN</b> with the following details:</p> <p>Patient's MRN  Patient's Name  Badge number of the Person who collected the sample  Date and Time of Sample Collection</p> <p>and must <b>APPEAR EXACTLY THE SAME</b> as indicated in the BestCare barcode label.</p> <p><b>For Outpatients:</b> Affix the BestCare label immediately. No need for handwritten labels but stick the <b>ORANGE STICKER</b> if necessary.  (i.e. Armbanded "Chemo or Oncology Patients" )</p>					
DNA IFA TITER	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
DUCHENNE MYOTONIC DYSTROPHY (DMD)	3 ml EACH	6 ml EACH	2 EDTA tubes (purple)	WHOLE BLOOD	MBL	KAMC
	<b>E - CONSENT FORM NEEDED</b>					

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
EBNA-G	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
EBV-EA	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
EBV-IgG	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
EBV-IgM	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
ENTEROVIRUS PCR ( CSF )	1 ml	1 ml	STERILE CONTAINER	CSF	MOLECULAR MICROBIOLOGY	KAMC
	<p>Samples are <b>PROCESSED DAILY</b> during working hours  Working hours: Daily 0700H to 1600H  <b>RESULTS</b> are available <b>WITHIN A DAY</b> if processed otherwise on the next working day.</p>					
EPSTEIN BARR VIRUS PCR (CSF) (EBV-PCR)	1 ml	1 ml	STERILE CONTAINER	CSF	MOLECULAR MICROBIOLOGY	KAMC
	<p>Samples are processed <b>EVERY TUESDAY ONLY</b>  <b>RESULTS</b> are available within <b>ONE WEEK</b>.</p>					
EPSTEIN BARR VIRUS PCR (PLASMA) (EBV-PCR)	2 ml	2 ml	2 EDTA TUBES (purple)	PLASMA	MOLECULAR MICROBIOLOGY	KAMC
	<p>Samples are processed <b>EVERY TUESDAY ONLY</b>  <b>RESULTS</b> are available within <b>ONE WEEK</b>.</p>					
ESR	2 ml	4 ml	EDTA (purple)	WHOLE BLOOD	HEMATOLOGY	KASCH and KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
ESTRADIOL	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC
ETHANOL	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC
DO NOT OPEN THE CAP and AVOID USING ALCOHOL SWABS in cleaning the venipuncture site						
FACTOR ASSAYS: II, V, VII, VIII, IX, X, XI, XII, XIII	2 ml (2 TUBES)	3.5 ml (3 TUBES)	Na Citrate (blue)	PLASMA	COAGULATION	KAMC
FACTOR V	2ml	3.5ml	Na Citrate (blue)	PLASMA	COAGULATION	KAMC
FACTOR V LEIDEN (FVL)	3 ml EACH	6 ml EACH	2 EDTA tubes (purple)	WHOLE BLOOD	MBL	KAMC
E - CONSENT FORM NEEDED						
FACTOR XIII	2ml	3.5ml	Na Citrate (blue)	PLASMA	COAGULATION	KAMC
FEBRILE AGGLUTININS	1 ml	10 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
FECALYSIS ( OVA AND PARASITE [O&P] / FECAL ANALYSIS / STOOL ANALYSIS)			STERILE CONTAINER	STOOL	MICROBIOLOGY	KAMC
FERRITIN	1 – 2 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH and KAMC



**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
FIBRINOGEN	2ml	3.5ml	Na Citrate (blue)	PLASMA	COAGULATION	KAMC and KASCH
FISH STUDY (Fluorescent In-Situ Hybridization)	2 ml	3ml	Na Heparin (green)	WHOLE BLOOD	CYTOGENETICS	CENTRAL LAB
FK 506 (TACROLIMUS)	2 ml	2 ml	EDTA (purple)	WHOLE BLOOD	ROUTINE CHEMISTRY	KAMC
	<p><b>DRAWN ON THE EXACT SCHEDULED TIME</b></p> <p>Samples will be <b>PROCESSED SAME DAY IF RECEIVED BEFORE CUT-OFF TIME</b></p> <p><b>CUT OFF TIME:</b>  KASCH : daily including weekends before 0900H  KAMC : daily including weekends before 1030H</p> <p><b>RESULTS</b> are available <b>WITHIN THE DAY</b> if processed otherwise on the next working day.</p>					
FLT3 ITD / D835 MUTATION ASSAY ( FMS-LIKE THYROSINE KINASE 3 )	3 ml EACH	6 ml EACH	2 EDTA tubes (purple)	WHOLE BLOOD	MBL	KAMC
FOLATE	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC
	COVERED WITH FOIL					
FOLLICLE STIMULATING HORMONE (FSH)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC
FRAGILE X	3 ml	6 ml	2 EDTA tubes (purple)	WHOLE BLOOD	MBL	KAMC
	E - CONSENT FORM NEEDED					
FREE KAPPA/LAMBDA	1 ml	3 ml	SST (yellow)	SERUM	SPECIAL CHEMISTRY	KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to [pages 7 to 11](#)**  
**Orderable Panels and its Contents please refer to [page 30 to 33](#)**  
**Definition of terms / Test Synonyms please refer to [page 34 to 35](#)**  
**Section Contact Numbers (Extension Numbers) please refer to [page 96](#)**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to [page 75](#) for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
FREE PSA	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC
FREE T3 (FT3)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH and KAMC
FREE THYROXINE (FT4)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH and KAMC
FUNCTIONAL PROTEIN C	2 ml	3.5 ml	Na Citrate (blue)	PLASMA	COAGULATION	KAMC
FUNCTIONAL PROTEIN C FREE	2 ml	3.5 ml	Na Citrate (blue)	PLASMA	COAGULATION	KAMC
FUNCTIONAL PROTEIN S	2 ml	3.5 ml	Na Citrate (blue)	PLASMA	COAGULATION	KAMC
FUNCTIONAL PROTEIN S FREE	2 ml	3.5 ml	Na Citrate (blue)	PLASMA	COAGULATION	KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
G6PD QUANTITATIVE	0.5 ml	1 ml	EDTA (purple)	WHOLE BLOOD	HEMATOLOGY	KAMC
GAMMA GLUTAMYL TRANSFERASE (GGT or GTP)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
GASTRIC PARIETAL CELL ANTIBODY (GPA)	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
GBS	N/A	N/A	RED TOP DRY SWAB	VAGINAL SWAB	MOLECULAR MICROBIOLOGY	KAMC
<p>Samples are <u>PROCESSED DAILY</u> during working hours  Working hours: Daily 0700H to 1600H ,  <u>RESULTS</u> are available <u>WITHIN A DAY</u> if processed otherwise on the next working day.</p>						
GENTAMYCIN PEAK – drawn 30 minutes after the end of infusion	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH and KAMC
DRAWN ON THE EXACT SCHEDULED TIME						
GENTAMYCIN TROUGH – drawn within 30 minutes prior to next dose	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH and KAMC
DRAWN ON THE EXACT SCHEDULED TIME						
GLUCOSE FASTING ( S )	0.6 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
REQUIRES 8 – 10 HOURS FASTING						

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
GLUCOSE RANDOM ( S )	0.6 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
GLUCOSE (CSF)	1 ml	1 ml	STERILE CONTAINER	CSF	ROUTINE CHEMISTRY	KAMC
GLUCOSE (U)	5 ml	5 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
GLUTAMATE DECARBOXYLASE (GAD)	1 ml	2 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
GROWTH HORMONE (GH)	2 ml	2 ml	SST (yellow)	SERUM	SPECIAL CHEMISTRY	CENTRAL LAB
HUMAN T-LYMPHOCYTE VIRUS ( HTLV 1&2 ANTIBODY )	1 ml	10 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
H1N1 PCR, FLU A, FLU B,	3 ml	3 ml	( UVTM ) UNIVERSAL VIRAL TRANSPORT MEDIA	NPS NASO-PHARYNGEAL SWAB	MOLECULAR MICROBIOLOGY	KAMC
	2 ml	2 ml	STERILE CONTAINER	NPA NASO-PHARYNGEAL ASPIRATE		
				BAL BRONCHO-ALVEOLAR LAVAGE		
				TRACHEAL ASPIRATE		
Samples are PROCESSED DAILY during working hours Working hours: Daily 0700H to 1600H  RESULTS are available WITHIN A DAY if processed otherwise on the next working day.						



**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
HAPTOGLOBIN	1 ml	3 ml	SST (yellow)	SERUM	SPECIAL CHEMISTRY	KAMC
HDL, ULTRA	1 ml	3 ml	SST (yellow)	SERUM	SPECIAL CHEMISTRY	KAMC
	REQUIRES 9 – 12 HOURS FASTING					
HEINZ BODY STAIN	0.5 ml	2 ml	EDTA (purple)	WHOLE BLOOD	HEMATOLOGY	KAMC
HEPARIN INDUCED THROMBOCYTOPENIA (HIT)	1 ml	5 ml	Na Citrate (blue)	PLASMA	SEROLOGY	KAMC
HEPATITIS A VIRUS IgG ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
HEPATITIS A VIRUS IgM ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
HEPATITIS B CORE ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
HEPATITIS B CORE IgM ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
HEPATITIS B SURFACE ANTIGEN QUALI	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
HEPATITIS B SURFACE ANTIGEN QUANTI	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
HEPATITIS B SURFACE ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
HEPATITIS B VIRUS PCR ( HBV-PCR )	2 ml	2 ml	2 EDTA TUBES (purple)	PLASMA	MOLECULAR MICROBIOLOGY	KAMC
	RESULTS are available within TWO WEEKS.					
HEPATITIS Be ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
HEPATITIS Be ANTIGEN	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
HEPATITIS C GENOTYPE ( PLASMA )	2 ml	2 ml	2 EDTA TUBES (purple)	PLASMA	MOLECULAR MICROBIOLOGY	KAMC
<b>RESULTS are available within THREE WEEKS.</b>						
HEPATITIS C VIRUS ANTIBODY	3 ml	10 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
HEPATITIS C VIRUS PCR ( HCV-PCR )	2 ml	2 ml	2 EDTA TUBES (purple)	PLASMA	MOLECULAR MICROBIOLOGY	KAMC
<b>Samples are PROCESSED DAILY during working hours</b> <b>Working hours: Daily 0700H to 1600H ,EXCEPT WEEKENDS</b> <b>RESULTS are available WITHIN A DAY if processed otherwise on the next working day.</b>						
HEPATITIS D VIRUS ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
HEREDITARY HEMOCHROMATOSIS ( HFE )	3 ml EACH	6 ml EACH	2 EDTA tubes (purple)	WHOLE BLOOD	MBL	KAMC
<b>E - CONSENT FORM NEEDED</b>						
HERPES SIMPLEX PCR	1 ml	1 ml	STERILE CONTAINER	CSF	MOLECULAR MICROBIOLOGY	KAMC
	3 ml	3 ml	( UVTM ) UNIVERSAL VIRAL TRANSPORT MEDIA	SKIN SWAB		
				ORAL SWAB		
	3 ml	6 ml	EDTA (purple)	PLASMA		
<b>Samples are PROCESSED DAILY during working hours</b> <b>Working hours: Daily 0700H to 1600H ,EXCEPT WEEKENDS</b> <b>RESULTS are available WITHIN A DAY if processed otherwise on the next working day.</b>						

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
HERPES SIMPLEX TYPE 1&2 IgG	2 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
HERPES SIMPLEX TYPE 1&2 IgM	2 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
HERPES SIMPLEX VIRUS DFA	n/a	n/a	BLUE TOP SWAB + 8 WELL SLIDE ** ( PROVIDED BY MOLECULAR MICROBIOLOGY LAB )	SKIN SWAB	MOLECULAR MICROBIOLOGY	KAMC
				GENITAL SWAB		
				ORAL SWAB		
	<p><u>Please call Molecular Microbiology Lab ext. # 11277 or 12458 to procure 8 well slides.</u></p> <p>Samples are <u>PROCESSED DAILY</u> during working hours <u>Working hours: Daily 0700H to 1600H ,EXCEPT WEEKENDS</u></p> <p><u>RESULTS</u> are available <u>WITHIN A DAY</u> if processed otherwise on the next working day.</p>					
HGB A1C	1 ml	3 ml	EDTA (purple)	WHOLE BLOOD	ROUTINE CHEMISTRY	CENTRAL LAB
HGB ELECTROPHORESIS	2 ml	4 ml	EDTA (purple)	WHOLE BLOOD	HEMATOLOGY	KAMC
HIV Ag/Ab	1 ml	10 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
HIV CONFIRMATORY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
HIV GENOTYPE ( PLASMA )	2 ml	2 ml	2 EDTA TUBES (purple)	PLASMA	MOLECULAR MICROBIOLOGY	KAMC
	<u>RESULTS</u> are available within <u>THREE WEEKS.</u>					

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
HLA TYPING-HLA B27	2 ml EDTA	10 ml ACD or 5 ml EDTA	ACD tube (yellow glass tube) or EDTA (purple)	WHOLE BLOOD	HLA	KAMC
HLA TYPING-HLA CLASS I (A,B,C,)	2 ml EDTA	10 ml ACD or 5 ml EDTA	ACD tube (yellow glass tube ) or EDTA (purple)	WHOLE BLOOD	HLA	KAMC
HLA TYPING-HLA CLASS II (A,B,C)	2 ml EDTA	10 ml ACD or 5 ml EDTA	ACD tube (yellow glass tube) or EDTA (purple)	WHOLE BLOOD	HLA	KAMC
HOMOCYSTEINE (HCY)	2 ml	2 ml	SST (yellow)	SERUM	SPECIAL CHEMISTRY	KAMC
HOMOVANILIC ACID (HVA) ( U ) 24 HOUR only	10 ml	10 ml	STERILE CONTAINER	24 hr URINE	BML	KAMC
HUMAN TISSUE TRANSGLUTAMINASE IgA ANTIBODY (h-tTg IgA)	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
HUMAN TISSUE TRANSGLUTAMINASE IgG ANTIBODY (h-tTg IgG)	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
HUMAN T-LYMPHOCYTE VIRUS CONFIRMATORY ( HTLV 1&2 CONFIRMATORY )	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
IFE ELECTROPHORESIS	1 ml	1 ml	SST SERO (BIG yellow)	SERUM	BML	KAMC
IGH – ( B- CELL CLONALITY ) ( IMMUNOGLOBULIN HEAVY CHAIN )	PET or 6 ml	PET or 6 ml	PET or 1 EDTA tube (purple)	PET/ WHOLE BLOOD	MBL	KAMC
IMMUNO CAP PHADIATOP	1 ml	6 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
IMMUNO CAP SPECIFIC IgE	1 ml	6 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
IMMUNO CAP TOTAL IgE	1 ml	6 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
IMMUNODEFICIENCY PANEL	1 ml EACH	2 ml EACH	EDTA (purple) + Na Heparin (green)	WHOLE BLOOD	FLOWCYTOMETRY	CENTRAL LAB
	<p><u>PRE-BOOKED</u> through phone <u>PRIOR SPECIMEN COLLECTION</u>.</p> <p><u>Testing</u> Should be performed <u>within 48 hours</u> of Collection.</p> <p>Store/Transport Specimen at <u>ROOM Temperature</u></p> <p>Please call Ext # 54248 or 54249</p> <p><b>**After working hours (beyond 1700 and weekends)</b> Contact through <b>Pager # 1184</b></p>					
IMMUNOGLOBULINS (IgA, IgM, IgG)	3 ml	5 ml	SST (yellow)	SERUM	SPECIAL CHEMISTRY	KAMC
INFECTIOUS MONONUCLEOSIS (MONOSPOT)	1 ml	6 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
INFLUENZA VIRUS A IgG	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
INFLUENZA VIRUS B IgG	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC



**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
INSULIN	1 ml	2 ml	SST (yellow)	SERUM	SPECIAL CHEMISTRY	CENTRAL LAB
INSULIN GROWTH FACTOR 1 (IGF1)	1 ml	2 ml	SST (yellow)	SERUM	SPECIAL CHEMISTRY	CENTRAL LAB
INTACH PARATHYROID HORMONE (iPTH)	1 – 2 ml	3 ml	EDTA (purple)	PLASMA	ROUTINE CHEMISTRY	KAMC
TRANSPORTED ON ICE						
IRON	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH and KAMC
JAK2 MUTATION (JANUSE KINASE)	3 ml	6 ml	2 EDTA tubes (purple)	WHOLE BLOOD	MBL	KAMC
E - CONSENT FORM NEEDED						
JO-1 ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
LACTATE DEHYDROGENASE (LDH)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
LACTIC ACID	1 ml	3 ml	Na Fluoride (gray)	PLASMA	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
TRANSPORTED ON ICE						
LDL, DIRECT	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH and KAMC
REQUIRES 9 – 12 HOURS FASTING						
LEAD	1 ml	1 ml	EDTA (purple)	WHOLE BLOOD	TOXICOLOGY	KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to [pages 7 to 11](#)**  
**Orderable Panels and its Contents please refer to [page 30 to 33](#)**  
**Definition of terms / Test Synonyms please refer to [page 34 to 35](#)**  
**Section Contact Numbers (Extension Numbers) please refer to [page 96](#)**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to [page 75](#) for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
LEGIONELLA PNEUMOPHILIA (AG) ANTIGEN (U)	2 ml	2 ml	STERILE CONTAINER	URINE	MOLECULAR MICROBIOLOGY	KAMC
<p>Samples are <b>PROCESSED DAILY</b> during working hours  <b>Working hours: Daily 0700H to 1600H ,EXCEPT WEEKENDS</b></p> <p><b>RESULTS</b> are available <b>WITHIN A DAY</b> if processed otherwise on the next working day.</p>						
LEUKEMIAS/LYMPHOMAS (BLOOD)	1 ml EACH	2 ml EACH	EDTA (purple) + Na Heparin (green)	WHOLE BLOOD	FLOWCYTOMETRY	CENTRAL LAB
<p><b>PRE-BOOKED</b> through phone <b>PRIOR SPECIMEN COLLECTION</b>.</p> <p><b>Send</b> samples to Flowcytometry lab <b>immediately</b>.</p> <p><b>Please call Ext # 54248 or 54249</b>  <b>**After working hours (beyond 1700 and weekends)</b>  <b>Contact through Pager # 1184</b></p>						
LEUKEMIAS/LYMPHOMAS ( BODY FLUID )	15 ml	15 ml	STERILE CONTAINER	BODY FLUID	FLOWCYTOMETRY	CENTRAL LAB
<p><b>PRE-BOOKED</b> through phone <b>PRIOR SPECIMEN COLLECTION</b>.</p> <p><b>Send</b> samples to Flowcytometry lab <b>immediately</b>.</p> <p><b>Please call Ext # 54248 or 54249</b>  <b>**After working hours (beyond 1700 and weekends)</b>  <b>Contact through Pager # 1184</b></p>						
LEUKEMIAS/LYMPHOMAS (CSF)	1 ml	1 ml	STERILE CONTAINER	CSF	FLOWCYTOMETRY	CENTRAL LAB
<p><b>PRE-BOOKED</b> through phone <b>PRIOR SPECIMEN COLLECTION</b>.</p> <p><b>Send</b> samples to Flowcytometry lab <b>immediately</b>.</p> <p><b>Please call Ext # 54248 or 54249</b>  <b>**After working hours (beyond 1700 and weekends)</b>  <b>Contact through Pager # 1184</b></p>						

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to [pages 7 to 11](#)**  
**Orderable Panels and its Contents please refer to [page 30 to 33](#)**  
**Definition of terms / Test Synonyms please refer to [page 34 to 35](#)**  
**Section Contact Numbers (Extension Numbers) please refer to [page 96](#)**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to [page 75](#) for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
LOW MOLECULAR WEIGHT HEPARIN ( LMW )	2 ml	3.5 ml	Na Citrate (blue)	PLASMA	COAGULATION	KAMC
LUPUS	2 ml	3.5 ml	Na Citrate (blue)	PLASMA	COAGULATION	KAMC
LUTEINIZING HORMONE (LH)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
MAGNESIUM (S)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
MAGNESIUM (U)	5 ml	5 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KASCH and KAMC
MAGNESIUM IONIZED	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC
MALARIA TOTAL ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
MAPLE SYRUP URINE DISEASE PROFILE ( PLASMA ) ( MSUD PROFILE )	0.5 ml	0.5 ml	Li Heparin (green)	PLASMA	BML	KAMC
MEASLES IgG ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
MEASLES IgM ANTIBODY	2 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
MENINGITIS MULTIPLEX PCR ( CSF )	1 ml	1 ml	STERILE CONTAINER	CSF	MOLECULAR MICROBIOLOGY	KAMC
<p>Samples are processed <b>EVERY TWO DAYS DURING WORKING HOURS</b>  <b>Working hours: Daily 0700H to 1600H</b></p> <p><b>RESULTS</b> are available <b>WITHIN 48 HOURS</b> if processed otherwise after the next two working days.</p>						

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
MERS CORONA VIRUS PCR	3 ml	3 ml	( UVTM ) UNIVERSAL VIRAL TRANSPORT MEDIA	NPS NASO-PHARYNGEAL SWAB	MOLECULAR MICROBIOLOGY	KAMC
	2 ml	2 ml	STERILE CONTAINER	NPA NASO-PHARYNGEAL ASPIRATE		
				BAL BRONCHO-ALVEOLAR LAVAGE		
				TRACHEAL ASPIRATE		
	Samples will be <u>PROCESSED IF RECEIVED BEFORE CUT-OFF TIME</u>  <u>CUT OFF TIME:</u> KASCH : working hours before 1000H KAMC : working hours before 1000H  <u>RESULTS ARE AVAILABLE WITHIN A DAY</u> if processed otherwise on the next working day.					
METANEPHRINE (U) 24 HOUR only	10 ml	10 ml	STERILE CONTAINER	24hr URINE	BML	KAMC
METHANOL	3 ml OR MORE	3 ml OR MORE	Na Fluoride (Gray) or EDTA (purple)	PLASMA or WHOLE BLOOD	TOXICOLOGY	KAMC
	TRANSPORTED ON ICE					
METHOTREXATE	1 ml	3 ml	EDTA (purple)	PLASMA	ROUTINE CHEMISTRY	KAMC



**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to [pages 7 to 11](#)**  
**Orderable Panels and its Contents please refer to [page 30 to 33](#)**  
**Definition of terms / Test Synonyms please refer to [page 34 to 35](#)**  
**Section Contact Numbers (Extension Numbers) please refer to [page 96](#)**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to [page 75](#) for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
METHYLENE TETRAHYDRO FOLATE REDUCTASE ( MTHFR )	3 ml	6 ml	2 EDTA tubes (purple)	WHOLE BLOOD	MBL	KAMC
	E - CONSENT FORM NEEDED					
METOTHREXATE	2 ml	4 ml	EDTA (purple)	WHOLE BLOOD	TOXICOLOGY	KAMC
MICROALBUMIN (U) (URINE ALBUMIN)	10 ml	10 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
MRSA NARES PCR	N/A	N/A	RED TOP DRY SWAB	NASAL SWAB	MOLECULAR MICROBIOLOGY	KAMC
	Samples are PROCESSED DAILY during working hours Working hours: Daily 0700H to 1600H ,EXCEPT WEEKENDS RESULTS are available WITHIN A DAY if processed otherwise on the next working day.					
MRSA SKIN and SOFT TISSUE PCR	N/A	N/A	RED TOP DRY SWAB	AXILLA	MOLECULAR MICROBIOLOGY	KAMC
				GROIN		
				EYE		
				WOUND		
				UMBILICA		
	Samples are PROCESSED DAILY during working hours Working hours: Daily 0700H to 1600H ,EXCEPT WEEKENDS RESULTS are available WITHIN A DAY if processed otherwise on the next working day.					
MUMPS IgG ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
METHYLENE TETRAHYDRO FOLATE REDUCTASE ( MTHFR )	3 ml	6 ml	2 EDTA tubes (purple)	WHOLE BLOOD	MBL	KAMC
	E - CONSENT FORM NEEDED					
METOTREXATE	2 ml	4 ml	EDTA (purple)	WHOLE BLOOD	TOXICOLOGY	KAMC
MICROALBUMIN (U) (URINE ALBUMIN)	10 ml	10 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
MRSA NARES PCR	N/A	N/A	RED TOP DRY SWAB	NASAL SWAB	MOLECULAR MICROBIOLOGY	KAMC
	Samples are PROCESSED DAILY during working hours Working hours: Daily 0700H to 1600H ,EXCEPT WEEKENDS  RESULTS are available WITHIN A DAY if processed otherwise on the next working day.					
MRSA SKIN and SOFT TISSUE PCR	N/A	N/A	RED TOP DRY SWAB	AXILLA	MOLECULAR MICROBIOLOGY	KAMC
				GROIN		
				EYE		
				WOUND		
				UMBILICA		
	Samples are PROCESSED DAILY during working hours Working hours: Daily 0700H to 1600H ,EXCEPT WEEKENDS  RESULTS are available WITHIN A DAY if processed otherwise on the next working day.					
MUMPS IgG ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
METHYLENE TETRAHYDRO FOLATE REDUCTASE ( MTHFR )	3 ml	6 ml	2 EDTA tubes (purple)	WHOLE BLOOD	MBL	KAMC
	E - CONSENT FORM NEEDED					
METOTREXATE	2 ml	4 ml	EDTA (purple)	WHOLE BLOOD	TOXICOLOGY	KAMC
MICROALBUMIN (U) (URINE ALBUMIN)	10 ml	10 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
MRSA NARES PCR	N/A	N/A	RED TOP DRY SWAB	NASAL SWAB	MOLECULAR MICROBIOLOGY	KAMC
	Samples are PROCESSED DAILY during working hours Working hours: Daily 0700H to 1600H ,EXCEPT WEEKENDS  RESULTS are available WITHIN A DAY if processed otherwise on the next working day.					
MRSA SKIN and SOFT TISSUE PCR	N/A	N/A	RED TOP DRY SWAB	AXILLA	MOLECULAR MICROBIOLOGY	KAMC
				GROIN		
				EYE		
				WOUND		
				UMBILICA		
	Samples are PROCESSED DAILY during working hours Working hours: Daily 0700H to 1600H ,EXCEPT WEEKENDS  RESULTS are available WITHIN A DAY if processed otherwise on the next working day.					
MUMPS IgG ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to [pages 7 to 11](#)**  
**Orderable Panels and its Contents please refer to [page 30 to 33](#)**  
**Definition of terms / Test Synonyms please refer to [page 34 to 35](#)**  
**Section Contact Numbers (Extension Numbers) please refer to [page 96](#)**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to [page 75](#) for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
MUMPS IgM ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
MYCOPLASMA IgG	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
MYCOPLASMA IgM	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
NEUTROPHIL FUNCTION TEST (BURST TEST)	1 ml EACH	2 ml EACH	EDTA (purple) + Na Heparin (green)	WHOLE BLOOD	FLOWCYTOMETRY	CENTRAL LAB
<p><u>PRE-BOOKED</u> through phone <u>PRIOR SPECIMEN COLLECTION</u>.</p> <p><u>Testing</u> Should be performed <u>within 24 hours</u> of Collection.</p> <p>Store/Transport Specimen at <u>ROOM Temperature</u></p> <p>Please call Ext # 54248 or 54249</p> <p><b>**After working hours (beyond 1700 and weekends)</b> Contact through <b>Pager # 1184</b></p>						
NAT – DONOR TESTING	N/A	6 ml	1 PLAIN TUBE (red top W/O GEL) or 1 EDTA tube (purple)	SERUM or PLASMA	MBL	KAMC
NAT-SCT TESTING	6 ml EACH	6 ml EACH	2 EDTA tubes (purple)	WHOLE BLOOD	MBL	KAMC
NEWBORN SCREENING (NBS)	ONE Appropriately filled Blood cards (Five Spots)	ONE Appropriately filled Blood cards (Five Spots)	Appropriately filled 1 NBS Card	WHOLE BLOOD	BML	KAMC
<p><u>All babies admitted in NICU will have at least 3 NBS test.</u></p> <p><b>FIRST:</b> Upon admission  <b>SECOND:</b> 48 Hours of life  <b>THIRD:</b> Upon discharge or at 28 Days of life  <b>** (whichever comes first)</b></p> <p>This will be done even if the baby was on TPN or had a blood transfusion. Blood Transfusion only affects ONE of the NBS results ( i.e. GALT ). If ever the baby was transfused, a forth specimen will be collected 120 days after the last transfusion.</p>						



**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
NK - LYMPHOCYTE PANEL	1 ml EACH	2 ml EACH	EDTA (purple) + Na Heparin (green)	WHOLE BLOOD	FLOWCYTOMETRY	CENTRAL LAB
	<p><u>PRE-BOOKED</u> through phone <u>PRIOR SPECIMEN COLLECTION.</u></p> <p><u>Testing</u> Should be performed <u>within 48 hours</u> of Collection.</p> <p>Store/Transport Specimen at <u>ROOM Temperature</u></p> <p>Please call Ext # 54248 or 54249</p> <p><b>**After working hours (beyond 1700 and weekends)</b> Contact through <b>Pager # 1184</b></p>					
NORMETANEPRHINE (U) 24 HOUR only	10 ml	10 ml	STERILE CONTAINER	24hr URINE	BML	KAMC
NPMI (NUCLEOPHOSMIN)	3 ml EACH	6 ml EACH	2 EDTA tubes (purple)	WHOLE BLOOD	MGL	KAMC
OPIATES (U) - included in TOX Screen Panel	10 ml	10 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
ORGANIC ACID (U) RANDOM	2 ml	4 ml	STERILE CONTAINER	URINE	BML	KAMC
OSMOLALITY ( S )	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC
	DO NOT OPEN THE CAP					
OSMOLALITY ( U )	10 ml	10 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
	DO NOT OPEN THE URINE CONTAINER CAP AFTER COLLECTION					

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to [pages 7 to 11](#)**  
**Orderable Panels and its Contents please refer to [page 30 to 33](#)**  
**Definition of terms / Test Synonyms please refer to [page 34 to 35](#)**  
**Section Contact Numbers (Extension Numbers) please refer to [page 96](#)**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to [page 75](#) for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
OTHER GENETIC TESTING NOT FOUND IN THIS LIST  **such as GENE PANEL SPECIFIC GENES GENE MUTATIONS DNA BANKING WHOLE EXOM SEQUENCING (WES)	3 ml EACH	6 ml EACH	2 EDTA tubes (purple)	WHOLE BLOOD	MBL	KAMC
E - CONSENT FORM NEEDED						
OVA AND PARASITE [O&P]  (FECALYSIS / FECAL ANALYSIS / STOOL ANALYSIS)			STERILE CONTAINER	STOOL	MICROBIOLOGY	KAMC
OXALATE ( U ) 24 HOUR only	10 ml	10 ml	STERILE CONTAINER	24hr URINE	BML	KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
P1 PANEL ( BASIC SCREEN, REQUIRES 8 -10 HOURS FASTING )	1 ml	2 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
P2 PANEL ( BASIC SCREEN, NON- FASTING )	1 ml	2 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
P3 PANEL ( RENAL FUNCTION TEST)	1 ml	2 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
P4 PANEL ( LIVER FUNCTION TEST)	1 ml	2 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
P5 PANEL ( CARDIAC ENZYMES )	1 ml	2 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
P6 PANEL ( TPN TESTING, NON- FASTING )	1.5 ml	4 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
P7 PANEL ( LIPID PROFILE, REQUIRES 9 – 12 HOURS FASTING )	1 ml	2 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH and KAMC
PANEL REACTIVE ANTIBODY (PRA)	5 ml	10 ml	PLAIN TUBE (red top w/o GEL)	WHOLE BLOOD	HLA	KAMC
<b>PRE-BOOKED PRIOR through phone PRIOR SPECIMEN COLLECTION</b> Please call Ext # 54248 or 54249 <b>**After working hours (beyond 1700 and weekends, contact through Pager # 1184</b>						

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to [pages 7 to 11](#)**  
**Orderable Panels and its Contents please refer to [page 30 to 33](#)**  
**Definition of terms / Test Synonyms please refer to [page 34 to 35](#)**  
**Section Contact Numbers (Extension Numbers) please refer to [page 96](#)**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to [page 75](#) for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
PARASITIC SEROLOGY (AMOE-ECHINO-SCHISTO-LESHM.)	1 ml	7 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
PAROXYSMAL NOCTURNAL HEMOGLOBINURIA  ( PNH CD55/CD59 )	1 ml	2 ml	4 EDTA tubes (purple)	WHOLE BLOOD	FLOWCYTOMETRY	CENTRAL LAB
<p><u>PRE-BOOKED</u> through phone <u>PRIOR SPECIMEN COLLECTION</u>.</p> <p><u>Testing</u> Should be performed <u>within 48 hours</u> of Collection.</p> <p>Store/Transport Specimen at <u>ROOM Temperature</u></p> <p>Please call Ext # 54248 or 54249  **After working hours (beyond 1700 and weekends)  Contact through <u>Pager # 1184</u></p>						
PARVO VIRUS B19 IgG & IgM	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
PH ( BODY FLUID )	2 ml	2 ml	STERILE CONTAINER	BODY FLUID	BML	KAMC
PHENOBARBITAL	1 ml	3 ml	EDTA (purple)	PLASMA	ROUTINE CHEMISTRY	KASCH and KAMC
DRAWN ON THE EXACT SCHEDULED TIME						
PHENYTOIN	1 ml	3 ml	EDTA (purple)	PLASMA	ROUTINE CHEMISTRY	KASCH and KAMC
DRAWN ON THE EXACT SCHEDULED TIME						
PHOSPHORUS (S)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
PHOSPHORUS (U) 24 HOUR	5 ml	5 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
PHOSPHORUS (U) RANDOM	5 ml	5 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
PLATELET AGGREGATION	2 ml (4 TUBES)	3.5 ml (4 TUBES)	Na Citrate (blue)	PLASMA	COAGULATION	KAMC
	REQUIRES PRIOR BOOKING BEFORE SPECIMEN COLLECTION. PLEASE CALL EXT# 11282 SEND to coagulation section IMMEDIATELY					
PLATELET FUNCTION ASSAY (PFA)	2 ml (2 TUBES)	3.5 ml (2 TUBES)	Na Citrate (blue)	PLASMA	COAGULATION	KAMC
	REQUIRES PRIOR BOOKING BEFORE SPECIMEN COLLECTION. PLEASE CALL EXT# 11282 SEND to coagulation section IMMEDIATELY					
PML-RARA **	3 ml	6 ml	2 EDTA tubes (purple)	WHOLE BLOOD	MBL	KAMC
	TRANSPORTED ON ICE					
POTASSIUM (S)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
POTASSIUM (U) 24 HOUR	5 ml	5 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
POTASSIUM (U) RANDOM	5 ml	5 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
PREALBUMIN	1 ml	3 ml	SST (yellow)	SERUM	SPECIAL CHEMISTRY	KAMC
PROCALCITONIN	1 ml	3 ml	SST (yellow)	SERUM	SPECIAL CHEMISTRY	CENTRAL LAB



**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
PROGESTERONE	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC
PROLACTIN	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC
PROTEIN (CSF)	1 ml	1 ml	STERILE CONTAINER	CSF	ROUTINE CHEMISTRY	KAMC
PROTEIN (U) 24 HOUR	5 ml	5 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
PROTEIN (U) RANDOM	5 ml	5 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
PROTEIN , TOTAL	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
PROTEIN C	2 ml	3.5 ml	Na Citrate (blue)	PLASMA	COAGULATION	KAMC
	<b>SEND to coagulation section IMMEDIATELY</b>					
PROTEIN ELECTROPHORESIS, SERUM (SPE)	2 ml	4 ml	SST SERO (BIG yellow)	SERUM	BML	KAMC
PROTEIN S	2 ml	3.5 ml	Na Citrate (blue)	PLASMA	COAGULATION	KAMC
	<b>SEND to coagulation section IMMEDIATELY</b>					
PROTEIN S & C, AT III, APC R	2 ml (2 TUBES)	3.5 ml (2 TUBES)	Na Citrate (blue)	PLASMA	COAGULATION	KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
PROTHROMBIN II MUTATION/ FACTOR II MUTATION/ P20210 GENE MUTATION ( FII MUTATION )	3 ml EACH	6 ml EACH	2 EDTA tubes (purple)	WHOLE BLOOD	MBL	KAMC
<b>E - CONSENT FORM NEEDED</b> <i>Requires prior <b>BOOKING</b> before sample collection.  Please call <b>EXT # 11680</b>.</i> <i>Sample sent outside.</i>						
PT/PTT	2ml	3.5ml	Na Citrate (blue)	PLASMA	COAGULATION	KAMC & KASCH
PYRUVATE	AS PER TUBE REQUIREMENT	AS PER TUBE REQUIREMENT	SPECIAL TUBE FROM THE RECEIVING LAB	WHOLE BLOOD	BML	KAMC
<i>Slowly dispense the blood into the prepared PYRUVATE tube.  Do not invert the tube.</i> <i>Transport on ice</i> <i>Send Immediately to RECEIVING lab (KASCH or KAMC)</i>						

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
RBC FOLATE	1 ml	3 ml	EDTA (purple)	WHOLE BLOOD	ROUTINE CHEMISTRY	KAMC
	COVERED WITH FOIL  Samples are <u>PROCESSED EVERY TUESDAY</u> before <u>CUT OFF TIME:</u>  <u>CUT OFF TIME:</u> KASCH : Tuesdays before 0900H KASCH : Tuesdays before 1030H  <u>RESULTS</u> are available <u>WITHIN A DAY</u> if processed, otherwise after the next running day.					
REPTILASE TIME	2 ml	3.5 ml	Na Citrate (blue)	PLASMA	COAGULATION	KAMC
RESPIRATORY BACTERIAL MULTIPLEX PCR	3 ml	3 ml	STERILE CONTAINER	BAL BRONCHO-ALVEOLAR LAVAGE	MOLECULAR MICROBIOLOGY	KAMC
				TRACHEAL ASPIRATE		
	2 ml	2 ml	STERILE CONTAINER	SPUTUM		
				NPA NASO-PHARYNGEAL ASPIRATE		
	N/A	N/A	BLUE TOP SWAB	NPS NASO-PHARYNGEAL SWAB		
RESULTS are available within <u>ONE WEEK</u> .						

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
RESPIRATORY DFA	3 ml	3 ml	( UVTM ) UNIVERSAL VIRAL TRANSPORT MEDIA	NPS NASO-PHARYNGEAL SWAB	MOLECULAR MICROBIOLOGY	KAMC
	2 ml	2 ml	STERILE CONTAINER	NPA NASO-PHARYNGEAL ASPIRATE		
				BAL BRONCHO-ALVEOLAR LAVAGE		
				TRACHEAL ASPIRATE		
	Samples are <u>PROCESSED DAILY</u> during working hours <u>Working hours:</u> Daily 0700H to 1600H, EXCEPT WEEKENDS <u>RESULTS</u> are available <u>WITHIN A DAY</u> if processed otherwise on the next working day.					
RESPIRATORY VIRAL MULTIPLEX PCR	3 ml	3 ml	( UVTM ) UNIVERSAL VIRAL TRANSPORT MEDIA	NPS NASO-PHARYNGEAL SWAB	MOLECULAR MICROBIOLOGY	KAMC
	3 ml	3 ml	STERILE CONTAINER	NPA NASO-PHARYNGEAL ASPIRATE		
				BAL BRONCHO-ALVEOLAR LAVAGE		
				TRACHEAL ASPIRATE		
	Samples are <u>PROCESSED DAILY</u> during working hours <u>Working hours:</u> Daily 0700H to 1600H, EXCEPT WEEKENDS <u>RESULTS</u> are available <u>WITHIN A DAY</u> if processed otherwise on the next working day.					

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to [pages 7 to 11](#)**  
**Orderable Panels and its Contents please refer to [page 30 to 33](#)**  
**Definition of terms / Test Synonyms please refer to [page 34 to 35](#)**  
**Section Contact Numbers (Extension Numbers) please refer to [page 96](#)**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to [page 75](#) for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
RETICULOCYTE COUNT	0.5 ml	2 ml	EDTA (purple)	WHOLE BLOOD	HEMATOLOGY	KASCH And KAMC
RHEUMATOID FACTOR	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
RPR	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
RUBELLA - IgG	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
RUBELLA IgM	1 ml	3 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
RAPID STREP TEST	N/A	N/A	SWAB WITH A KIT  ** ( COLLECT THE SWAB WITH A KIT FROM THE MICROBIOLOGY LAB BEFORE SPECIMEN COLLECTION )		MICROBIOLOGY	KAMC
	<b>TRANSPORTED IMMEDIATELY AFTER COLLECTION.</b>  Page on-call @ <b>pager # 1273</b> during this times: Friday: 1600 till 0700 the Next Day Saturday : 1600 to 2100					



**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
SALICYLATE (ASPIRIN)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC
DRAWN ON THE EXACT SCHEDULED TIME						
SERUM PREGNANCY	5 ml	1 ml	SST SERO (BIG yellow)	SERUM	MICROBIOLOGY	KASCH And KAMC
Processed in KASCH during working hours only <b>WORKING HOURS:</b> (Daily 0700H to 1600H and EXCEPT WEEKENDS) Otherwise, sent to Main Laboratory.						
SICKLE CELL SCREEN	2 ml	4 ml	EDTA (purple)	WHOLE BLOOD	HEMATOLOGY	
SIROLIMUS	1 ml	2 ml	EDTA (purple)	WHOLE BLOOD	ROUTINE CHEMISTRY	KAMC
DRAWN ON THE EXACT SCHEDULED TIME Samples are <b>PROCESSED EVERY TUESDAY</b> before <b>CUT OFF TIME:</b> <b>CUT OFF TIME:</b> KASCH : Tuesdays before 0900H KAMC : Tuesdays before 1030H <b>RESULTS</b> are available <b>WITHIN A DAY</b> if processed, otherwise after the next running day.						
SNRP for PRADER WILLI SYNDROME ( PWS )	3 ml EACH	6 ml EACH	2 EDTA tubes (purple)	WHOLE BLOOD	MBL	KAMC
TRANSPORTED ON ICE E - CONSENT FORM NEEDED						
SODIUM (S)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
SODIUM (U) 24 HOUR	5 ml	5 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
SODIUM (U) RANDOM	5 ml	5 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
SPINAL MUSCULAR ATROPHY ( SMA )	3 ml EACH	6 ml EACH	2 EDTA tubes (purple)	WHOLE BLOOD	MBL	KAMC
	E - CONSENT FORM NEEDED					
STONE ANALYSIS	SUITABLE STONE SAMPLE	SUITABLE STONE SAMPLE	STERILE CONTAINER	RENAL STONE	BML	KAMC
STOOL CULTURE (C FECES)			STERILE CONTAINER	STOOL	MICROBIOLOGY	KAMC
STOOL REDUCING SUBSTANCE			STERILE CONTAINER	STOOL	UAR	KAMC
SYPHILIS CONFIRMATORY ( WESTERN BLOT TEST )	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
SYPHILIS TOTAL ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to [pages 7 to 11](#)**  
**Orderable Panels and its Contents please refer to [page 30 to 33](#)**  
**Definition of terms / Test Synonyms please refer to [page 34 to 35](#)**  
**Section Contact Numbers (Extension Numbers) please refer to [page 96](#)**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to [page 75](#) for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
TACROLIMUS (FK 56)	2 ml	2 ml	EDTA (purple)	WHOLE BLOOD	ROUTINE CHEMISTRY	KAMC
	<p><b>DRAWN ON THE EXACT SCHEDULED TIME</b></p> <p>Samples will be <b>PROCESSED SAME DAY IF RECEIVED BEFORE CUT-OFF TIME</b></p> <p><b>CUT OFF TIME:</b>  KASCH : daily including weekends before 0900H  KAMC : daily including weekends before 1030H</p> <p><b>RESULTS</b> are available <b>WITHIN THE DAY</b> if processed, otherwise on the next working day.</p>					
TANDEM MS	ONE Appropriately filled Blood cards (Five Spots)	ONE Appropriately filled Blood cards (Five Spots)	Appropriately filled 1 NBS Card	WHOLE BLOOD	BML	KAMC
TB QUANTIFERON	1 ml in each tube	1 ml in each tube	SPECIAL TUBE c/o SEROLOGY	SERUM	SEROLOGY	KAMC
	<p>Samples will only be <b>ACCEPTED</b> during <b>WEEKDAYS</b> and <b>BEFORE CUT-OFF TIME</b></p> <p><b>CUT-OFF TIME:</b>  KASCH : 1300H  KAMC : 1400H</p>					
TCRG ( T- CELL CLONALITY ) ( T-CELL RECEPTOR GENE )	PET or 6 ml	PET or 6 ml	PET or 1 EDTA tube (purple)	PET/ WHOLE BLOOD	MBL	KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
TELOMERE LENGTH ANALYSIS	6 ml EACH	6 ml EACH	2 EDTA tubes (purple)	WHOLE BLOOD	MBL	SEND-OUT
	<p><b>E - CONSENT FORM NEEDED</b>  Requires prior <u>BOOKING</u> before sample collection.</p> <p>Please call <b>EXT # 11680.</b>  <b>SUNDAY</b> only.</p> <p><b>CUT-OFF TIME:</b>  Should reach <u>MBL SECTION</u> in main hospital <u>before 0900H</u></p>					
TESTOSTERONE	1 – 1.5 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC
TETANUS ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
THEOPHYLLINE	1 ml	3 ml	EDTA (purple)	PLASMA	ROUTINE CHEMISTRY	KAMC
	DRAWN ON THE EXACT SCHEDULED TIME					
THROMBIN TIME	2 ml	3.5 ml	Na Citrate (blue)	PLASMA	COAGULATION	KAMC
THYROGLOBULIN	1 ml	3 ml	SST (yellow)	SERUM	SPECIAL CHEMISTRY	CENTRAL LAB
THYROID STIMULATING HORMONE (TSH)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH and KAMC
T-LYMPHOCYTE SUBSET EVALUATION	2 ml EACH	4 ml EACH	EDTA (purple) + Na Heparin (green)	WHOLE BLOOD	FLOWCYTOMETRY	CENTRAL LAB
	<p><b>PRE-BOOKED</b> through phone <b>PRIOR SPECIMEN COLLECTION.</b></p> <p><u>Testing</u> Should be performed <u>within 48 hours</u> of Collection.</p> <p>Store/Transport Specimen at <u>ROOM Temperature</u></p> <p>Please call Ext # 54248 or 54249  <b>**After working hours (beyond 1700 and weekends)</b>  Contact through <b>Pager # 1184</b></p>					

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
TORCH	3-4 ml	6-8 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
TOTAL IRON BINDING CAPACITY	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC
TOTAL PROSTATE SPECIFIC ANTIGEN (PSA)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC
TOX SCREEN PANEL ( U ) **Different from Drug Screen Panel Urine**	10 ml	10 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
TOXOPLASMA IgG ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
TOXOPLASMA IgM ANTIBODY	1 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
TRANSFUSION REACTION INVESTIGATION	2 ml	3 ml	EDTA (purple)	WHOLE BLOOD	BLOOD BANK TRANSFUSION MEDICINE SERVICES	KAMC And KASCH
	<p>Do not send through Pneumatic Capsule and <b>SEND IMMEDIATELY</b>.</p> <p>Send with the following:            Appropriate "TRANSFUSION REACTION FORM"            The "BLOOD BAG" with which the reaction was observed            Urine</p> <p><b>LABELING Requirement:</b></p> <p>Should be <b>LABELED HANDWRITTEN</b> with the following details:</p> <p>Patient's MRN            Patient's Name            Badge number of the Person who collected the sample            Date and Time of Sample Collection</p> <p>and must <b>APPEAR EXACTLY THE SAME</b> as indicated in the BestCare barcode label.</p>					



**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
TRANSFUSION REACTION INVESTIGATION (FOR NEONATES)	1 ml		EDTA (purple)	WHOLE BLOOD	BLOOD BANK TRANSFUSION MEDICINE SERVICES	KAMC And KASCH
	<p>Do not send through Pneumatic Capsule and <b>SEND IMMEDIATELY</b>.</p> <p>Send with the following:            Appropriate "TRANSFUSION REACTION FORM"            The "BLOOD BAG" with which the reaction was observed            Urine</p> <p>LABELING Requirement:</p> <p>Should be <b>LABELED HANDWRITTEN</b> with the following details:</p> <p>Patient's MRN            Patient's Name            Badge number of the Person who collected the sample            Date and Time of Sample Collection</p> <p>and must <b>APPEAR EXACTLY THE SAME</b> as indicated in the BestCare barcode label.</p>					
TRANSFERRIN	1 ml	3 ml	SST (yellow)	SERUM	SPECIAL CHEMISTRY	CENTRAL LAB
TRIGLYCERIDE	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH and KAMC
	REQUIRES 9 – 12 HOURS FASTING					
TROPONIN I	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC and STAT LAB

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
TYPE AND SCREEN / CROSSMATCHING	2 ml	3 ml	EDTA (purple)	WHOLE BLOOD	BLOOD BANK TRANSFUSION MEDICINE SERVICES	KAMC And KASCH
<p>Do not send through Pneumatic Capsule.</p> <p><b>LABELING Requirement:</b></p> <p><b>For Inpatients:</b> Should be <b>LABELED HANDWRITTEN</b> with the following details:</p> <p>Patient's MRN  Patient's Name  Badge number of the Person who collected the sample  Date and Time of Sample Collection</p> <p>and must <b>APPEAR EXACTLY THE SAME</b> as indicated in the BestCare barcode label.</p> <p><b>For Outpatients:</b> Affix the BestCare label immediately. No need for handwritten labels but stick the <b>ORANGE STICKER</b> if necessary.  (i.e. Armbanded "Chemo or Oncology Patients" )</p>						
TYPE AND SCREEN / CROSSMATCHING (FOR NEONATES)	1 ml		EDTA (purple)	WHOLE BLOOD	BLOOD BANK TRANSFUSION MEDICINE SERVICES	KAMC And KASCH
<p>Do not send through Pneumatic Capsule.</p> <p><b>LABELING Requirement:</b></p> <p><b>For Inpatients:</b> Should be <b>LABELED HANDWRITTEN</b> with the following details:</p> <p>Patient's MRN  Patient's Name  Badge number of the Person who collected the sample  Date and Time of Sample Collection</p> <p>and must <b>APPEAR EXACTLY THE SAME</b> as indicated in the BestCare barcode label.</p> <p><b>For Outpatients:</b> Affix the BestCare label immediately. No need for handwritten labels but stick the <b>ORANGE STICKER</b> if necessary.  (i.e. Armbanded "Chemo or Oncology Patients" )</p>						

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
UF HEPARIN	2 ml	3.5 ml	Na Citrate (blue)	PLASMA	COAGULATION	KAMC
UNSATURATED IRON BINDING CAPACITY	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC
UREA NITROGEN (S)	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
UREA NITROGEN (U) 24 HOUR	5 ml	5 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
UREA NITROGEN (U) RANDOM	5 ml	5 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
URIC ACID (S)	0.6 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KASCH KAMC and STAT LAB
URIC ACID (U) 24 HOUR	5 ml	5 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
URIC ACID (U) RANDOM	5 ml	5 ml	STERILE CONTAINER	URINE	ROUTINE CHEMISTRY	KAMC
URINALYSIS (UAR)	10ml	10ml	STERILE CONTAINER	URINE	UAR	KAMC And KASCH
URINE KETONES	1ml	5ml	STERILE CONTAINER	URINE	MICROBIOLOGY	KAMC
URINE REDUCING SUBSTANCE		10 ml	STERILE CONTAINER	URINE	UAR	KAMC

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
VALPROIC ACID	1 ml	3 ml	EDTA (purple)	PLASMA	ROUTINE CHEMISTRY	KASCH and KAMC
DRAWN ON THE EXACT SCHEDULED TIME						
VANCOMYCIN PEAK – drawn 30 minutes after the end of infusion	1 ml	3 ml	EDTA (purple)	PLASMA	ROUTINE CHEMISTRY	KASCH and KAMC
DRAWN ON THE EXACT SCHEDULED TIME						
VANCOMYCIN TROUGH – drawn within 30 minutes prior to next dose	1 ml	3 ml	EDTA (purple)	PLASMA	ROUTINE CHEMISTRY	KASCH and KAMC
DRAWN ON THE EXACT SCHEDULED TIME						
VANILLYLMADELIC ACID (VMA) ( U ) 24 HOUR only	10 ml	10 ml	STERILE CONTAINER	24hr URINE	BML	KAMC
VARICELLA ZOSTER (VZV) IgG	2 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
VARICELLA ZOSTER (VZV) IgM	2 ml	5 ml	SST SERO (BIG yellow)	SERUM	SEROLOGY	KAMC
VARICELLA ZOSTER VIRUS DFA	N/A	N/A	BLUE TOP SWAB + 8 WELL SLIDE ** ( PROVIDED BY MOLECULAR MICROBIOLOGY LAB )	SKIN VESICAL LESION	MOLECULAR MICROBIOLOGY	KAMC
<p>Please call Molecular Microbiology Lab ext. # 11277 or 12458 to procure 8 well slides.</p> <p>Samples are <b>PROCESSED DAILY</b> during working hours</p> <p>Working hours: Daily 0700H to 1600H ,EXCEPT WEEKENDS</p> <p><b>RESULTS</b> are available <b>WITHIN A DAY</b> if processed otherwise on the next working day.</p>						

**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
VDRL ( CSF )	1 ml	1 ml	STERILE CONTAINER	CSF	SEROLOGY	KAMC
VITAMIN A	0.5 ml	0.5 ml	PLAIN TUBE (red top W/O GEL)	SERUM	BML	KAMC
COVERED WITH FOIL						
VITAMIN B1	0.5 ml	0.5 ml	EDTA (purple)	WHOLE BLOOD	BML	KAMC
COVERED WITH FOIL						
VITAMIN B12	1 ml	3 ml	SST (yellow)	SERUM	ROUTINE CHEMISTRY	KAMC
VITAMIN B6	0.5 ml	0.5 ml	EDTA (purple)	PLASMA	BML	KAMC
COVERED WITH FOIL						
VITAMIN D 1,25	2 – 3ml	3 ml	SST (yellow)	SERUM	SPECIAL CHEMISTRY	CENTRAL LAB
VITAMIN D 25-OH	2 – 3 ml	3 ml	PLAIN TUBE (RED w/o Gel)	SERUM	ROUTINE CHEMISTRY	CENTRAL LAB
VITAMIN E	0.5 ml	0.5 ml	PLAIN TUBE (red top W/O GEL)	SERUM	BML	KAMC
COVERED WITH FOIL						
VON WILLIBRAND FACTOR ANTIGEN, RISTOCETIN CO-FACTOR ASSAY or Vw AG, Vw RISTOCETIN COFACTOR, FVIII	2 ml (2 TUBES)	3.5 ml (2 TUBES)	Na Citrate (blue)	PLASMA	COAGULATION	KAMC



**ORDER of DRAW, TUBE ILLUSTRATIONS, and appropriate TUBE INVERSION TIMES, Please refer to pages 7 to 11**  
**Orderable Panels and its Contents please refer to page 30 to 33**  
**Definition of terms / Test Synonyms please refer to page 34 to 35**  
**Section Contact Numbers (Extension Numbers) please refer to page 96**

**\*\*Other Genetic testing (MBL Assays) , that is not found in this list, Please refer to page 75 for possible match of your query, otherwise, call through EXT # 11680. \*\***

TEST NAME	MINIMUM VOLUME FOR PEDIATRICS	MINIMUM VOLUME FOR ADULTS	COLLECTION TUBE or COLLECTION MATERIAL TO USE	SAMPLE TYPE	SECTION	TESTING LOCATION
VRE PCR	N/A	N/A	RED TOP DRY SWAB	RECTAL SWAB or PRE-ANAL SWAB	MOLECULAR MICROBIOLOGY	KAMC
<p>Samples are <b>PROCESSED DAILY</b> during working hours  <b>Working hours: Daily 0700H to 1600H</b></p> <p><b>RESULTS</b> are available <b>WITHIN A DAY</b> if processed otherwise on the next working day.</p>						
WHOLE EXOM SEQUENCING (WES) for BIOCHEMICAL GENETICS TESTING  **Different from WHOLE EXOM SEQUENCING for Molecular Pathology Test for Genetic diseases - refer to MBL section **	3 - 5 ml + Appropriately filled Blood cards	3 - 5 ml + Appropriately filled Blood cards	2 EDTA tubes (purple) + Appropriately filled NBS Card	WHOLE BLOOD	BML	KAMC
<p>Coordinate with <b>Biochemical Metabolic Lab</b>  <b>Please Call EXT# 40915/40916/40917</b></p> <p>Send with <b>Biochemical Genetic Laboratory Requisition Form</b> C/o Mr. Ahmed</p>						
Y – CHROMOSOME MICRODELETION (AZOSPERMIA FACTOR)	3 ml EACH	6 ml EACH	2 EDTA tubes (purple)	WHOLE BLOOD	MBL	KAMC
E - CONSENT FORM NEEDED						
ZINC	2 ml	2ml	Trace Element tube (Royal Blue)	SERUM	TOXICOLOGY	KAMC

## 24. SEND – OUT/REFERRED TEST:

The **TWO REFERRAL LABORATORIES** where the samples are referred to:

- ❖ **BIOSCIENTIA Germany** – every **SUNDAY, TUESDAY** and **WEDNESDAY**
- ❖ **KING FAISAL SPECIALIST HOSPITAL Laboratory** – everyday (Sunday – Thursday) except weekends
  - A. RESEARCH LAB
  - B. REFERENCE LAB

The turnaround time varies on the test requested and depends on what is indicated in the test catalogue.

*\*\*\* List of SEND OUT/REFERRED TESTS is available in the intranet/online help. Please visit the following sites listed below:*

- A. <http://portal.ngha.med/sites/Riyadh/lab/labonline/Pages/lab.aspx>
- B. <http://kamc-r.ngha.med/department/riyadh/laboratory/sendout/index.html>

## 25. DEPARTMENT OF PATHOLOGY & LABORATORY CONTACT NUMBERS

<b>KAMC-NGHA LABORATORY</b>	<b>Contact Numbers</b>
RECEIVING AREA	11274/ 11176
REFERRAL AREA	13261
	FAX NUMBER 11174
ER RUNNERS	13976
ACC AREA (OUTPATIENT LABORATORY)	18675
CHEMISTRY	12670/ 11261/ 11262
HEMATOLOGY	11281
COAGULATION	11282
BLOOD BANK	11276/ 11251
SEROLOGY	11355
METABOLIC LAB	40915/ 40916/ 40917
MICROBIOLOGY	11235/ 11273
MOLECULAR BIOLOGY (MBL)	11680
URINALYSIS	11315
TOXICOLOGY	18483
HISTOPATHOLOGY	12145/11283
VIROLOGY	17480
HLA	11260
NEUROGENETICS	16665
LAB ADMINISTRATOR	12175

<b>KASCH LABORATORY</b>	<b>Contact Numbers</b>
KASCH RECEIVING AREA	52162
KASCH BLOOD BANK	52163
KASCH CHEMISTRY	52161
KASCH COAGULATION	52160
KASCH HEMATOLOGY	52160
KASCH LAB ADMINISTRATOR	52183
KASCH PHLEBOTOMY AREA (ADULT)	52241/52182
KASCH PHLEBOTOMY AREA (PAEDIATRIC)	52249/52248

<b>CENTRAL LABORATORY</b>	<b>Contact Numbers</b>
FLOWCYTOMETRY	54246 / 54249
CYTOLOGY LAB	54102
CYTOGENETICS LAB	54106
SPECIAL CHEMISTRY LAB	54244

*For Further Information Please Contact:*

*Department of Pathology & Laboratory Medicine*

*Extension 13353 / Pager 5261*

[lab1@ngha.med.sa](mailto:lab1@ngha.med.sa)