

MLC Specimen Requirements

Test	Specimen Requirement	Turn around Time	Use of Test
24 Hr Urine Total Protein	24 hr urine	same day	Measurements are used in the diagnosis and treatment of diseases involving the kidney.
24 Hr Urine Creatinine	24 hr urine	same day	Measurements are used in the diagnosis and treatment of diseases involving the kidney.
Albumin	Plasma. Green Top Tube	same day	Used in the monitoring and treatment of numerous diseases involving the liver and kidney. Nutritional marker.
Alkaline Phosphatase (Alk P)	Plasma. Green Top Tube	same day	Useful in the diagnosis of hepatobiliary disorder and bone disease.
ALT (SGPT)	Plasma. Green Top Tube	same day	Useful in the diagnosis and treatment of heart disease and certain liver diseases.
Amiodarone	Serum. Gold top tube.	3-7 days	An antiarrhythmic drug. It is used to correct life-threatening heartbeat problems called ventricular arrhythmias in adults.
Aluminum	1 navy top tube	3-7 days	Can be increased in patients on dialysis or in patients with renal failure, alzheimer's disease and dementia.
Ammonia	Plasma from Purple top tube FZ.	3-7 days	Elevated levels have been associated with severe liver dysfunction.
Amylase	Serum. Gold top tube.	3 -7 days	The most common cause of elevation of serum amylase is inflammation of the pancreas (pancreatitis).
Anti-nuclear Antibody (ANA)	Serum. Gold top tube.	3 -7 days	Useful in the diagnosis of SLE and other autoimmune disorders.
AST (SGOT)	Plasma. Green Top Tube	same day	Increased amounts can be found with hepatitis, liver necrosis, cirrhosis, and liver metastasis.
Automated Differential (Diff)	Purple top, can be same tube as CBC	same day	Leukocyte differential parameters (NE, LY, EO, BA, and MO) expressed as a percentage.
Basophils %	Purple top, included in Diff	same day	Causes of basophilia can include allergic reactions, chickenpox, ulcerative colitis, chronic hemolytic anemias, and Hodgkins disease.
BNP	Plasma from Purple top tube. FZ.	3-7 days	May be increased in congestive heart failure, acute myocardial infarction, coronary angioplasty and hypertension.
BUN	Plasma. Green Top Tube	same day	Used to assess Kidney function.
Calcium	Plasma. Green Top Tube	same day	Useful in the diagnosis of parathyroid disease, some bone disorders and chronic renal disease.
Carbamazepine (Tegretol)	Serum from red top to transfer tube. Collect as Trough.	3 -7 days	An anticonvulsant, antimanic drug used to treat epilepsy, trigeminal neuralgia and mania and bipolar disorders.
Carbon Dioxide (CO2)	Plasma. Green Top Tube	same day	Used in the diagnosis and treatment of numerous disorders associated with changes in body acid-base balance.
Cardio, CRP	Serum. Gold top tube.	3-7 days	Increased levels may be found in inflammatory conditions, including bacterial infection, active arthritis and myocardial infarctions.
Carnitine	Serum from red top to transfer tube. Collect as Trough.	3-7 days	Useful in diagnosing and monitoring patients with primary or secondary carnitine deficiency. Sometimes given to EPO resistant patients.

Test	Specimen Requirement	Turn around Time	Use of Test
CBC with DIFF	Purple top.	same day	Screening test for various disease states including anemia, leukemia and inflammatory processes.
CEA	Serum. Gold top tube.	3- 7 days	Provides important information about patient prognosis, recurrence of tumors after surgical removal and effectiveness of treatment.
Cholesterol	Plasma. Green Top Tube	same day	In conjunction with other tests, provides valuable information for the risk of coronary artery disease.
CL (Chloride)	Plasma. Green Top Tube	same day	Used in the diagnosis and treatment of electrolyte and metabolic disorders such as cystic fibrosis and diabetic acidosis.
C-peptide	Gold top tube, frozen.	3- 7 days	Useful in the evaluation of pancreatic function.
C-Reactive Protein (CRP)	Serum, gold top tube	3 - 7 days	Increased levels may be found in inflammatory conditions, including bacterial infection, active arthritis and myocardial infarctions.
Creatine Kinase, total (CK)	Serum, gold top tube	3 - 7 days	Used in determining myocardial infarction and skeletal muscle damage.
Creatinine	Plasma. Green Top Tube	same day	Useful in evaluation of Kidney function and monitoring renal dialysis.
CRP	Serum. Gold top tube.	3- 7 days	Increased levels may be found in inflammatory conditions, including bacterial infection, active arthritis and myocardial infarctions.
Cyclosporine	Purple top tube, stored at Room Temp. Trough Level	3 -7 days	Is an immunosuppressant therapeutic agent used in the prevention of organ graft rejection.
Digoxin	Serum from red top to transfer tube.	same day	Used to monitor the treatment of congestive heart failure and atrial dysrhythmias.
Dilantin (Phenytoin)	Serum from red top to transfer tube.	same day	Used to monitor the treatment of grand mal epilepsy.
Dilantin free and total	Serum from red top to transfer tube.	3- 7 days	Used singly or in combination with other anticonvulsants to treat grand mal epilepsy.
Drugs of Abuse, Serum	Serum. 2 Gold top tubes.	>7 days	Screen, not legal.
Drugs of Abuse, Urine	60 mL. Urine.	3-7 days	Screen, not legal.
Direct Bilirubin (DBIL)	Plasma. Green Top Tube	same day	Used in the diagnosis and treatment of liver, hemolytic, hematologic and metabolic disorders, including hepatitis and gallbladder obstruction.
Eosinophils %	Purple top, included in Diff.	same day	Eosinophilia is seen in allergic disorders and invasive parasitoses.
Ferritin	Serum from red top to transfer tube. FZ.	same day, M-F	Useful in the diagnosis of hypochromic, microcytic anemia.
Folate	Serum from red top to transfer tube. FZ.	same day, M-F	Deficiency is common in patients whose diets do not include fruits and vegetables.
Gentamicin	Serum from red top to transfer tube.	same day	Antibiotic used in the treatment of gram-positive and gram-negative bacterial infections.

Test	Specimen Requirement	Turn around Time	Use of Test
Glucose	Serum. Gold top tube.	same day	Measurements are used in the diagnosis and treatment of diabetes and hypoglycemia.
Glycohemoglobin, (Hgb A1C)	Purple top, can be same tube as CBC.	same day, M-F	Used to assess long term diabetic control in diabetes.
H. pylori IgG Antibody	Serum. Gold top tube.	3 -7 days	Implicated as the causative agent in non-ulcer dyspepsia, duodenal ulcers, gastritis and gastric ulcers.
Haptoglobin	Serum. Gold top tube.	3 - 7 days	Decreased levels may be found in hemolytic disease, hepatocellular disease and infectious mononucleosis.
HCV Viral Load	Plasma from dark Purple Tube. FZ.	3-7 days	Quantitates actual viral particles present.
HDL	Serum, Gold top tube.	same day	"Good" cholesterol, in that risk of cardiovascular disease decreases with increase of HDL.
Hematocrit	Purple top, included in CBC	same day	Measurement of packed red blood cells. Used in determining anemia.
Hemoglobin	Purple top, included in CBC	same day	Usual method for determining anemia.
Hemoglobin x 3	Purple top, included in CBC.	same day	Hemoglobin value multiplied by 3
Heparin Platelet Antibody	Serum from red top to transfer tube.	3-7 days	Can induce thrombocytopenia, a decreased platelet count, due to antibody stimulation.
Hepatitis B Core Antibody	Serum. Gold top tube.	3-7 days	Used to determine the status of hepatitis B infection. The hepatitis B Core antibody indicates previous infection and natural immunity.
Hepatitis B Core IgM Antibody	Serum. Gold top tube.	3 - 7 days	Specific marker for diagnosis of acute infection with Hep. B virus.
Hepatitis B surface Antibody	Serum red top to Transfer or 1 gold	same day, M-F	Presence of anti-HBs is an indicator of clinical recovery and subsequent immunity to hepatitis B virus.
Hepatitis B surface Antigen	Serum red top to Transfer or 1 gold.	same day, M-F	Results in conjunction with other serological and clinical information may be used for the laboratory diagnosis of individuals with acute or chronic hepatitis B.
Hepatitis C Antibody (Screening)	Serum. Gold top tube.	1-4 days	Used as a screening test to detect past or current hepatitis C infections.
Hepatitis C Antibody RIBA (confirmatory)	Serum. Gold top tube.	3 -7 days	Aids in differential diagnosis of Hepatitis C.
Hepatitis B and C Viral Load	3 purple top tubes, spin, plasma to TT, FZ.	3 -7 days	Confirmatory test that detects and quantitates viral particles. Useful in monitoring disease.
HIV	Serum, gold top tube.	3-7 days	Screen.
HIV Viral Load	Plasma from dark Purple Tube. FZ.	3-7 days	Confirmatory test that detects and quantitates HIV viral particles. Useful in monitoring disease.
HIV Western Blot	Gold top Tube.	3-7 days	Confirmatory HIV test.
Homocysteine	Serum. Gold top tube.	3 -7 days	Elevated levels may be seen in patients at risk for coronary heart disease and stroke.

Test	Specimen Requirement	Turn around Time	Use of Test
IgE	Serum. Gold top tube .	3 -7 days	Used for the diagnosis of allergic disease. A normal IgE level does not exclude the possible presence of an allergic disorder.
Immunofixation	Serum. Gold top tube.	3 -7 days	Monoclonal increases in IgG or IgA are often associated with diseases such as multiple myeloma, lymphomas or leukemia.
Iron (Fe)	Plasma. Green Top Tube	same day	Useful in the diagnosis of iron deficiency.
KT/V	Plasma, Post green top and 1 Pre- Tall green top	same day	Is the fractional clearance of urea and is used to monitor urea removal during dialysis.
LDH	Plasma. Green Top Tube	same day	Used as a diagnostic aid for myocardial infarction. Also for malignancies, anemias, and acute liver and muscle injury.
LDL	Plasma. Green Top Tube	same day	Made up of primarily cholesterol, relates directly with the risk of coronary artery disease. High level indicates a high risk, and a low level indicates a low risk.
Lipase	Serum. Gold top tube.	3-7 days	Provides confirmatory evidence for diagnosis of pancreatitis.
Liver Panel	Plasma. Green Top Tube	same day	Group of tests used to assess the function of the liver.
Lymphocytes %	Purple top, included in Diff.	same day	Increase can be seen in infectious mono, viral hepatitis and other viral infections.
Magnesium (MG)	Plasma. Green Top Tube	same day	Magnesium can be decreased in acute pancreatitis. It can be increased in chronic renal failure.
MCH	Purple top, included in CBC	same day	Mean Corpuscular Hemoglobin. Represents the amount of hemoglobin by weight in the average red cell.
MCHC	Purple top, included in CBC.	same day	Mean Corpuscular Hemoglobin Concentration. Represents the concentration of hemoglobin (weight/volume) in the average red cell.
MCV	Purple top, included in CBC.	same day	Mean Corpuscular Volume
Monocytes	Purple top, included in Diff.	same day	Increase is seen in the recovery phase of many acute infections.
NA(Sodium)	Plasma. Green Top Tube	same day	Measurements are useful in the diagnosis and treatment of aldosteronism, diabetes insipidus and adrenal hypertension.
Neutrophils %	Purple top, included In Diff .	same day	Increases can be seen in any acute insult to the body, whether infectious or not.
PD Adequacy	24 hr urine, 3ml PD fluids .	same day	Peritoneal dialysis measurement of Adequacy.
Pet Study	Green top Tube, PD Fluids.	same day	Used to determine Peritoneal membrane status.
Phenobarbital	Serum from red top to transfer tube. Trough Level	3 - 7 days	Is an anticonvulsant used for the long-term treatment of grand mal seizures and cortical focal seizures.
Phenytoin (Dilantin)	Serum from red top to transfer tube.	same day	Is an anticonvulsant hydantoin used for the treatment of grand mal and complex partial seizures.

Test	Specimen Requirement	Turn around Time	Use of Test
Phosphorus	Plasma. Green top, included in Chem Comp.	same day	Serum phosphorous levels alone are of limited diagnostic value and should be correlated with Calcium levels.
Platelet Count .	Purple top, included in CBC.	same day	Must be present in adequate numbers and have proper function to aid in hemostasis (clotting).
Potassium (K+)	Plasma. Green Top Tube	same day	Useful in monitoring electrolyte balance.
Prealbumin (PAB)	Plasma. Green Top Tube	same day	Decreased in protein-calorie malnutrition, liver disease and acute inflammation.
Protein Electrophoresis (SPE)	3 Gold top tubes.	3-7 days	Useful in detecting abnormal protein bands.
PSA	Serum. Gold top tube.	3-7 days	Can be elevated in men with prostate cancer, benign prostatic hypertrophy, and inflammatory conditions of the prostate.
PTH Intact	Serum from red top to transfer tube.	same day, M-F	Useful in making the diagnosis of primary hyperparathyroidism.
RBC	Purple top, included in CBC.	Same day	Red Blood Cell count. Decreases are usually seen in anemias.
RBC, Folate	Purple top. Room temp.	3-7 days	Has diagnostic significance in nutritional deficiencies.
Recirculation Studies	Arterial, venous, peripheral serum or plasma	same day	Used to monitor how much blood is being recirculated. Arterial, venous, and peripheral BUN is measured.
Reticulocyte Count	Purple top, can be same tube as CBC.	same day	Used in evaluating RBC production.
Rheumatoid Factor (RA)	Serum. Gold top tube.	3-7 days	Elevated levels found in collagen vascular diseases and in a significant percentage of otherwise normal elderly patients.
RPR	Serum. Gold top tube.	3-7 days	Screening test for syphilis. False positive results may occur due a various disease states.
SGPT (ALT)	Plasma. Green Top Tube	same day	Levels are useful in the diagnosis and treatment of heart disease and certain liver diseases.
SGOT (AST)	Plasma. Green Top Tube	same day	Found in both the heart and liver. Increased levels may been seen in damage to either.
Sirolimus (Rapamycin)	2 purple top tubes.	3 - 7 days	Immunosuppressant drug used to prevent organ graft rejection.
Sodium (NA)	Plasma. Green top tube, included in Chem Comp.	same day	Measurements are useful in the diagnosis and treatment of aldosteronism, diabetes insipidus and adrenal hypertension.
Serum Protein Electrophoresis (SPE)	3 gold top tubes.	3-7 days	
T3 Total	Serum. Gold top tube.	3-7 days	Used for the diagnosis of T3 thyrotoxicosis. Thyroid status.
T3 Uptake	Serum. Gold top tube.	3-7 days	May be decreased in pregnancy and increased in liver disease. Thyroid status.
T4, Free	Serum. Gold top tube.	3-7 days	Used for the diagnosis of hypothyroidism and hyperthyroidism.
T4 Total	Serum. Gold top tube.	3 - 7 days	Used for the diagnosis of hypothyroidism and hyperthyroidism.

Test	Specimen Requirement	Turn around Time	Use of Test
Tacrolimus	Purple tube.	3-7 days	Immunosuppressive drug which has been shown to be effective for the treatment of rejection following transplantation.
Testosterone	Serum. Gold top tube.	3-7 days.	Useful in the differential diagnosis of male hypogonadism, premature or delayed puberty and female hirsutism and virilization.
TIBC	Plasma. Green Top Tube	same day	Alterations in iron and total iron-binding capacity levels result from changes in iron intake, absorption, storage and release mechanisms.
Total Bilirubin (TBIL)	Plasma. Green Top Tube	same day	Useful in the diagnosis and treatment of liver, hemolytic and metabolic disorders.
Total Protein (TP)	Plasma. Green Top Tube	same day	Useful in the treatment of a variety of diseases involving the liver, kidney or bone marrow.
Transferrin	Plasma. Green Top Tube	same day	Aids in the diagnosis of malnutrition, acute inflammation, infection, assessment of renal function and red blood cell disorders.
Triglycerides (Trig)	Plasma. Green Top Tube	same day	Along with other tests, provides valuable information for the assessment of coronary heart disease risk.
TSH	Serum. Gold top tube.	same day	Useful in the diagnosis of hypothyroidism/hyperthyroidism. Thyroid status
UIBC	Plasma. Green Top Tube	same day	The measurement of unsaturated iron-binding capacity, UIBC, in combination with serum iron is useful diagnostic tool in the determination of various iron disorders.
Uric Acid	Plasma. Green Top Tube	same day	Measurements are useful in the diagnosis and treatment of numerous renal and metabolic disorders including renal failure, gout and leukemia.
URR	One (1) Post green top and one (1) Pre- gold top tube.	same day	Urea Reduction Ratio measures the adequacy dialysis session.
Valproic Acid (Depakote)	Serum from red top to transfer tube.	same day	Used as therapy in the treatment of seizures.
Vancomycin	Serum from red top to transfer tube.	same day	An antibiotic used in the treatment of bacterial infections, especially methicillin-resistant staph.
Vitamin B12	Serum. Gold top tube.	same day, M-F	May be decreased in pernicious anemia, malabsorption and certain congenital and biochemical disorders.
Vit. D Active	Serum from red top to transfer tube. FZ.	7+ days	Test is used to assess patient's vitamin D status, evaluate hypo- and hypercalcemia and investigate causes of osteomalacia.
Vit. D Panel	Serum from red top to transfer tube.	3-7 days	Test is used to assess patient's vitamin D status, evaluate hypo- and hypercalcemia and investigate causes of osteomalacia.
WBC	Purple top, included in CBC.	same day	Screening test for various disease states to include leukemia and inflammatory processes.
Zinc	1 navy top tube	3 - 7 days	Essential element in many enzyme systems including wound healing, immune function and fetal development.

Disclaimer: "Use of test" The information is provided "as is" without any express or implied warranties. While reasonable effort has been made to ensure the accuracy of the information, Meridian Laboratory assumes no responsibility for errors or omissions, or for damages resulting from use of the information herein.

Required volume is based on the assumption that a full tube is submitted for testing. If tube is less than half full, please call lab for requirements before submitting.

FZ=Frozen

TAT= Time from receipt of specimen in laboratory to result.