

Rancho Los Amigos
Chemistry Immunology Specimen Collection Guide

For specimen collected off sites: Centrifuge all specimens. Do not send unspun specimens except for specimen collected in non-gel tube.

High priority (HP) tests require serum from a gold top tube that is not used for any other testing. No additional test can be added on for the specimen tube.

Test	Specimen Container	Minimum Volume	Specimen Stability	Transport
Acetaminophen Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen: capped at 2-8 °C	Refrigerated
Alanine Aminotransferase (ALT)	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Albumin Body Fluid	Primary Acceptable Specimen: Chemistry Miscellaneous Fluids Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of fluid	2-8 °C	Refrigerated
Albumin Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Albumin Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Alkaline Phosphatase	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Alpha-Fetoprotein (AFP) HP Test	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Ammonia Level Do not collect at mobile site. Send patient to facility for testing.	Primary Acceptable Specimen: Aliquot of plasma from Lavender top	False Bottom tube: 700 µL of plasma	Separated plasma: Centrifuge immediately after collection and remove plasma from blood cells. Freeze plasma immediately. 24 hours at -15 to -25 °C	Frozen
Amphetamines, Qualitative Urine	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 5 mL of urine	2-8 °C	Refrigerated
Amylase Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	2-8 °C	Refrigerated
Amylase Level 24 Hour Urine	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of urine	2-8 °C (Collect without additives/preservative)	Refrigerated

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Test	Specimen Container	Minimum Volume	Specimen Stability	Transport
Amylase Level Body Fluid	Primary Acceptable Specimen: Chemistry Miscellaneous Fluids Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of fluid	2-8 °C	Refrigerated
Amylase Level Urine Amylase Level Urine Timed	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of urine	2-8 °C (Collect without additives/preservative)	Refrigerated
Aspartate Aminotransferase (AST)	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Barbiturates, Qualitative Urine	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 5 mL of urine	2-8 °C	Refrigerated
Basic Metabolic Panel (BMP)	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Benzodiazepines, Qualitative Urine	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 5 mL of urine	2-8 °C	Refrigerated
Beta Hydroxybutyrate	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Beta-2 Microglobulin	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Bilirubin Body Fluid	Primary Acceptable Specimen: Chemistry Miscellaneous Fluids Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of fluid	2-8 °C Protect from light.	Refrigerated
Bilirubin Direct	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C Protect from light.	Refrigerated
Bilirubin Total	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C Protect from light.	Refrigerated
Blood Urea Nitrogen (BUN)	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 20-25 °C	Refrigerated
C3 Complement	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
C4 Complement	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
CA 15-3	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated

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Test	Specimen Container	Minimum Volume	Specimen Stability	Transport
CA 19-9	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Calcium 24 Hour Urine	(Collect with 20 mL of 6N HCL) Primary Acceptable Specimen: <u>Aliquot into Yellow top tube with NO additive</u>	Yellow top tube with NO additive: 2 mL of urine	2-8 °C (Collect with 20 mL of 6N HCL)	Refrigerated
Calcium Level Total	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8°C	Refrigerated
Calcium Urine Calcium Timed Urine	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of urine	2-8 °C	Refrigerated
Cancer Antigen 125 (CA 125)	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Cannabinoids, Qualitative Urine	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 5 mL of urine	2-8°C	Refrigerated
Carbamazepine Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : capped at 2-8 °C	Refrigerated
Carbon Dioxide Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Carcinoembryonic Antigen (CEA)	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Chloride 24 Hour Urine	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of urine	2-8 °C (Collect without additives/preservative)	Refrigerated
Chloride Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Chloride Urine Chloride Timed Urine	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of urine	2-8 °C (Collect without additives/preservative)	Refrigerated
Cholesterol Body Fluid	Primary Acceptable Specimen: Chemistry Miscellaneous Fluids Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of Fluid	2-8 °C	Refrigerated

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Test	Specimen Container	Minimum Volume	Specimen Stability	Transport
Cholesterol HDL	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Cholesterol LDL, Direct (LDL Direct)	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Cholesterol Total	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Cocaine Metabolites Qualitative Urine	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 5 mL of urine	2-8°C	Refrigerated
Comprehensive Metabolic Panel	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Cortisol, Random; Cortisol AM; Cosyntropin Stimulation Cortisol; Cortisol AM - Post Dexamethasone	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C 24 hours at 20-25 °C	Refrigerated
C-Peptide Do not collect at mobile site. Send patient to facility for testing.	Primary Acceptable Specimen: Serum Gold top with gel	False Bottom tube: 700 µL of serum	Centrifuge specimen : -15 to -25 °C Aliquot of serum from Gold top tube in Sarstedt false bottom tube with cap	Frozen
C-Reactive Protein, High Sensitivity	Primary Acceptable Specimen: Serum Gold top with gel:	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Creatine Kinase (CK)	Primary Acceptable Specimen: Serum Gold top with	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Creatinine 24 Hour Urine Creatinine Clearance 24 Hour Serum Creatinine must be ordered/completed prior to or after urine is completed to perform creatinine clearance calculation	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of urine	2-8 °C (Collect without additives/preservative)	Refrigerated

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Test	Specimen Container	Minimum Volume	Specimen Stability	Transport
Creatinine Body Fluid	Primary Acceptable Specimen: Chemistry Miscellaneous Fluids Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of fluid	2-8 °C	Refrigerated
Creatinine Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Creatinine Urine Creatinine Urine Timed Creatinine Clearance Timed Serum Creatinine must be ordered/completed prior to or after urine is completed to perform creatinine clearance calculation	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of urine	2-8 °C (Collect without additives/preservative)	Refrigerated
Cyclic Citrullinated Peptide Ab (CCP Ab IgG) HP Test	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Cyclosporine	Primary Acceptable Specimen: Whole Blood (K2-EDTA or K3- EDTA)	Lavender top: 1 mL whole blood	2-8 °C	Refrigerated
Digoxin Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Drugs of Abuse Screen Urine	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 5 mL of urine	2-8°C	Refrigerated
Electrolyte Panel	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Estradiol Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C 24 hours at 20-25 °C	Refrigerated
Ethanol Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : tightly capped at 2-8°C	Refrigerated
Ferritin Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Folate Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C 2 hours at 20-25 °C	Refrigerated

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Test	Specimen Container	Minimum Volume	Specimen Stability	Transport
Follicle Stimulating Hormone (FSH Level)	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Free T3	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Free T4	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Fructosamine	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Gamma Glutamyl Transferase (GGT)	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Gentamicin Random, Gentamicin Peak, Gentamicin Trough	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Glucose 24 Hour Urine	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of urine	Store the samples in a refrigerator. (Collect without additives/preservative) Test will be canceled if greater than 1 day.	Refrigerated Must send sample same day.
Glucose Body Fluid	Primary Acceptable Specimen: Chemistry Miscellaneous Fluids Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of fluid	2-8 °C	Refrigerated
Glucose CSF	Primary Acceptable Specimen: CSF Collection Tube	CSF Tube: 700 µL CSF	CSF samples should be analyzed for glucose immediately. Call to alert lab if sending CSF specimen.	Refrigerated
Glucose Fasting GTT 1 Hr. Gestational GTT 2 Hr. Gestational GTT 3 Hr. Gestational GTT 2 Hr. Non-Gestational Do not collect at mobile site. Send patient to facility for testing.	Primary Acceptable Specimen: Aliquot of plasma from Light Grey	False Bottom tube: 700 µL of plasma	Fluoride Plasma:	Refrigerated

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Test	Specimen Container	Minimum Volume	Specimen Stability	Transport
Glucose Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Glucose Urine Glucose Urine Timed	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of urine	Perform immediately. If the assay cannot be performed immediately, store the samples in a refrigerator. (Collect without additives/preservative) Test will be canceled if greater than 1 day.	Refrigerated Must send sample same day.
Haptoglobin	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Hepatic Function Panel	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Hepatitis A Antibody Total HP Test	Acceptable Specimen: Serum Gold top with gel Only original Gold top tube with gel will be accepted.	Gold top with gel: 2 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Hepatitis A Antibody, IgM	Acceptable Specimen: Serum Gold top with gel Only original Gold top tube with gel will be accepted.	Gold top with gel: 2 mL serum	Centrifuge specimen : 2-8 °C 2 hours at 25 °C	Refrigerated
Hepatitis B Core Antibody Total HP Test	Acceptable Specimen: Serum Gold top with gel Only original Gold top tube with gel will be accepted.	Gold top with gel: 2 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated

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Hepatitis B Core IgM	Acceptable Specimen: Serum Gold top with gel Only original Gold top tube with gel will be accepted.	Gold top with gel: 2 mL serum	Centrifuge specimen : 2-8 °C 2 hours at 25 °C	Refrigerated
Hepatitis B Surface Antibody HP Test	Acceptable Specimen: Serum Gold top with gel Only original Gold top tube with gel will be accepted.	Gold top with gel: 2 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Hepatitis B Surface Antigen	Acceptable Specimen: Serum Gold top with gel Only original Gold top tube with gel will be accepted.	Gold top with gel: 2 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Hepatitis C Antibody HP Test	Acceptable Specimen: Serum Gold top with gel Only original Gold top tube with gel will be accepted.	Gold top with gel: 2 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
HIV 1/2 Antibody Screen HP Test	Acceptable Specimen: Serum Gold top with gel Only original Gold top tube with gel will be accepted.	Gold top with gel: 2 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Homocysteine	Primary Acceptable Specimen: Light Green top with gel	Light green top with gel: 2 mL plasma	2-8 °C Centrifuged immediately after collection	Refrigerated

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Test	Specimen Container	Minimum Volume	Specimen Stability	Transport
Human Chorionic Gonadotropin Quantitative (HCG Quantitative) HP Test	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Human Epididymis Protein 4 (HE4)	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C 5 hours at 15-25 °C	Refrigerated
Immunoglobulin A (IgA)	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Immunoglobulin E (IgE)	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Immunoglobulin G (IgG)	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Immunoglobulin M (IgM)	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Insulin Level Total	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C 4 hours at 20-25 °C	Refrigerated
Iron Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Iron Panel	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Kappa/Lambda Free Light Chains with Ratio	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Lactate Dehydrogenase (LDH)	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
In connection with certain diseases (e.g. hepatopathy, diseases of skeletal muscles, malignant tumors), the LDH-4 and LDH-5 isoenzyme portions are increased and unstable in cooled and frozen samples; this may lead to an incorrect LDH value in samples collected from patients suffering from such diseases.				
Lactate Dehydrogenase Body Fluid	Primary Acceptable Specimen: Chemistry Miscellaneous Fluids Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of fluid	2-8°C	Refrigerated
Lactate Level	Primary Acceptable Specimen: Aliquot of plasma from Light Grey	False Bottom tube: 700 µL of plasma	2-8°C	Refrigerated

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Test	Specimen Container	Minimum Volume	Specimen Stability	Transport
Lipase Body Fluid	Primary Acceptable Specimen: Chemistry Miscellaneous Fluids Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of fluid	2-8 °C	Refrigerated
Lipase Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Lipid Panel	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Lithium Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Luteinizing Hormone (LH)	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Magnesium 24 Hour Urine	(Collect with 20 mL of 6N HCL) Primary Acceptable Specimen: Aliquot into Yellow top tube with NO additive:	Yellow top tube with NO additive: 2 mL of urine	2-8 °C (Collect with 20 mL of 6N HCL)	Refrigerated
Magnesium Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Magnesium Urine Magnesium Urine Timed	Primary Acceptable Specimen: Yellow top tube with NO additive: BD#364979	Yellow top tube with NO additive: 2 mL of urine	2-8 °C	Refrigerated
Methotrexate Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	2-8 °C	Refrigerated
Microalbumin/Creatinine Ratio	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of urine	2-8 °C	Refrigerated
Opiates Qualitative (Opiate, Qual)	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 5 mL of urine	2-8 °C	Refrigerated
Osmolality, serum	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C Test will be canceled if greater than 2 days.	Refrigerated Must transport immediately.
Osmolality, urine	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of urine	2-8 °C Test will be canceled if greater than 1 day.	Refrigerated Must transport immediately.

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Oxycodone, Qualitative Urine	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 5 mL of urine	2-8 °C	Refrigerated
Parathyroid Hormone (PTH)	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C 8 hours at 15-25 °C	Refrigerated
Phencyclidine, Qualitative Urine	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 5 mL of urine	2-8°C	Refrigerated
Phenobarbital Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : capped 2-8 °C	Refrigerated
Phenytoin Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : capped at 2-8 °C	Refrigerated
Phosphorus 24 Hour Urine	Primary Acceptable Specimen: Aliquot into Yellow top tube with NO additive (Collect with 20 mL of 6N HCL)	Yellow top tube with NO additive: 2 mL of urine	2-8°C 24-hour urine: Store cooled during collection (Collect with 20 mL of 6N HCL)	Refrigerated
Phosphorus Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	2-8 °C 24 hours at 15-25°C	Refrigerated
Phosphorus Urine Phosphorus Timed Urine	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of urine	2-8°C Store cooled during collection. (Collect without additives/preservative)	Refrigerated
Potassium 24 Hour Urine	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of urine	2-8 °C (Collect without additives/preservative)	Refrigerated
Potassium Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Potassium Urine Potassium Timed Urine	Primary Acceptable Specimen: Yellow top tube with NO additive:	Yellow top tube with NO additive: 2 mL of urine	2-8 °C (Collect without additives/preservative)	Refrigerated
Prealbumin	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Pro Brain Natriuretic Peptide (Pro BNP, NT)	Primary Acceptable Specimen: Light Green top	Light green top with gel: 2 mL plasma	2-8 °C	Refrigerated

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Procalcitonin HP Test	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C 24 hours at RT temperature	Refrigerated
Progesterone Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Prolactin Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Prostate Specific Antigen (PSA)	Primary Acceptable Specimen: Serum Gold top with	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Protein 24 Hour Urine Protein/Creatinine Ratio,24 Hr Urine	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of urine	2-8 °C (Collect without additives/preservative)	Refrigerated
Protein Body Fluid	Primary Acceptable Specimen: Chemistry Miscellaneous Fluids Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of fluid	2-8 °C	Refrigerated
Protein CSF	Primary Acceptable Specimen: CSF Collection Tube	CSF Tube: 700 µL CSF	1 day at 20-25 °C Call to alert lab if sending CSF specimen.	Refrigerated
Protein Electrophoresis, serum	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Protein Electrophoresis, urine	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 5 mL of urine	2 to 8 °C	Refrigerated
Protein Total	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Protein Urine Protein, Timed Urine Protein/Creatinine Ratio,Random Urine Protein/Creatinine Ratio, Timed Urine	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of urine	2-8 °C (Collect without additives/preservative)	Refrigerated
Renal Function Panel	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Rheumatoid Factor	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated

**Rancho Los Amigos
Chemistry Immunology Specimen Collection Guide**

For specimen collected off sites: Centrifuge all specimens. Do not send unspun specimens except for specimen collected in non-gel tube.

High priority (HP) tests require serum from a gold top tube that is not used for any other testing. No additional test can be added on for the specimen tube.

Test	Specimen Container	Minimum Volume	Specimen Stability	Transport
RPR / TPPA	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Rubella Antibody IgG HP Test	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Salicylate Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Sodium 24 Hour Urine	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of urine	2-8 °C (Collect without additives/preservative)	Refrigerated
Sodium Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Sodium Urine Sodium Timed Urine	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of urine	2-8 °C (Collect without additives/preservative)	Refrigerated
Tacrolimus	Primary Acceptable Specimen: Whole Blood (K2-EDTA or K3- EDTA)	Lavender top: 1 mL whole blood	2-8 °C	Refrigerated
Testosterone Total	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Thyroid Peroxidase Antibodies (Anti TPO)	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Thyroid Stimulating Hormone (TSH) TSH w/FT4, if ind (TSH with reflex to FT4)	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 2 mL of serum serum	Centrifuge specimen : 2-8 °C	Refrigerated
Thyroxine (T4)	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Tobramycin Random Tobramycin Peak Tobramycin Trough	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : capped at 2-8° C	Refrigerated if transported within 3 days. Frozen if more than 3 days.
Triglycerides	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated

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Test	Specimen Container	Minimum Volume	Specimen Stability	Transport
Triglycerides Body Fluid	Primary Acceptable Specimen: Chemistry Miscellaneous Fluids Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of fluid	2-8 °C	Refrigerated
Troponin-T	Primary Acceptable Specimen: Light Green top	Light green top with gel: 2 mL plasma or serum	24 hours at 2-8°C	Refrigerated
Urea Nitrogen 24 Hour Urine	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of urine	2-8 °C (Collect without additives/preservative)	Refrigerated
Urea Nitrogen Urine Urea Nitrogen Timed Urine	Primary Acceptable Specimen: Yellow top tube with NO additive: BD#364979	Yellow top tube with NO additive: 2 mL of urine	2-8 °C (Collect without additives/preservative)	Refrigerated
Uric Acid	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C	Refrigerated
Uric Acid 24 Hour Urine	(Collect with 10 grams boric acid) Primary Acceptable Specimen: Aliquot into Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of urine	4 days at 20-25 °C 7 days at -15 to -25 °C (Collect with 10 grams boric acid)	Room temperature if transported within 4 days. Frozen if more than 4 days.
Uric Acid Body Fluid	Primary Acceptable Specimen: Chemistry Miscellaneous Fluids Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of fluid	2-8°C	Refrigerated
Uric Acid Urine Uric Acid Timed Urine	Primary Acceptable Specimen: Yellow top tube with NO additive	Yellow top tube with NO additive: 2 mL of urine	4 days at 20-25 °C 7 days at -15 to -25 °C (Collect without additives/preservative)	Room temperature if transported within 4 days. Frozen if more than 4 days.
Urinalysis w/ Micro, if indicated	Primary Acceptable Specimen: Yellow-red striped top tube with preservative	Yellow-red striped top tube with preservative: 8 mL of urine	72 hours at 15-25°C	Room temperature
Valproic Acid Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : capped at 2-8 °C	Refrigerated

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Chemistry Immunology Specimen Collection Guide**

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Test	Specimen Container	Minimum Volume	Specimen Stability	Transport
Vancomycin Random Vancomycin Peak Vancomycin Trough	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : capped at 2-8 °C	Refrigerated
Vitamin B12 Level	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Centrifuge specimen : 2-8 °C 2 hours at 20-25 °C	Refrigerated
Vitamin D 25 OH	Primary Acceptable Specimen: Serum Gold top with gel	Gold top with gel: 1.5 mL serum	Refrigerated 2-8 °C	Refrigerated