

Stability of Commonly Requested Serum/Plasma Chemistry Specimens

h=hours	d=days	w=week	m=month	* = see note	na = not applicable
		for aliquotted samples		on SST / PST gel	
TEST	Frozen	2-8 C	20-25 C	2-8 C	Notes:
Albumin	3 m	1 w	5 d	1 w	
Alkaline Phosphatase	3 m	1 w	5 d	5 d	
ALT (SGPT)	3 m	1 w	1 d	1 w	
Amylase	3 m	1 w	5 d	1 w	
AST (SGOT)	3 m	1 w	5 d	3 d	
Basic Metabolic Profile	3 m	1 w	1 d	2 d	
Bicarbonate (CO2)*	3 m	1 w *	1 d	1 w *	In a full, sealed, unopened tube.**
Bilirubin, Direct*	3 m	2 d	1 d	2 d	Light sensitive
Bilirubin, Total*	3 m	2 d	1 d	2 d	Light sensitive
Blood Urea Nitrogen (BUN)	3 m	1 w	5 d	1 w	
Calcium	1 year	1 w	5 d	1 w	
Carbamazepine*	1 year	1 w	1 d	1 hr	Off gel within 1 hour
Chloride	3 m	1 w	5 d	1 w	
Cholesterol	1 year	1 w	5 d	1 w	
CK-MB	3 m	1 w	1 d	1 w	Light sensitive
Comp. Metabolic Profile	3 m	2 d	1 d	2 d	Light sensitive
Creatine Kinase	3 m	1 w	5 d	1 w	Light sensitive
Creatinine	1 year	1 w	1 d	1 w	
Digoxin*	1 year	1 w	1 d	6 hrs	Off gel within 6 hrs
Free Thyroxine (Free T4)	3 m	1 d	1 d	1 d	
GGT*	1 year	1 w	5 d	1 w	Off cells in 1 hour
Glucose*	1 year	1 w	5 d	1w / 2d	Off cells in 1 hour
HCG	1 year	1 w	1 d	1 w	
HDL-Cholesterol	do not freeze	5 d	1 d	5 d	
Hemoglobin A1c (GH)	3 m	1 w	5 d	na	
Lactate Dehydrogenase	1 m	5 d*	5 d*	5d* / na	Serum samples ONLY***
Liver Panel	3 m	2 d	1 d	2 d	Light sensitive
Magnesium	1 year	1 w	5 d	1 w	
Phenobarbital*	1 year	1 w	1 d	1 hr	Off gel with in 1 hour
Phenytoin*	1 year	1 w	1 d	na	Do not use gel separator
Phosphorus	1 year	1 w	5 d	3 d	
Potassium	1 year	1 w	5 d	2 d	
Prostate Specific Antigen	1 m	2 d	1 d	2 d	
Renal Function Panel*	3 m	1 w	1 d	1 w	Sep. from cells within 1 hr
Sodium	1 year	1 w	5 d	1 w	
Theophylline*	1 year	1 w	1 d	1 hr	Off gel within 1 hour
Thyroid Stimulating Hormone	1 m	1 w	1 d	1 w	
Total Protein	1 year	1 w	5 d	1 w	
Triglyceride	3 m	1 w	5 d	1 w	
Troponin-I	1 m	1 w	1 d	1 w	
Uric Acid	1 m	1 w	5 d	1 w	

Aliquot studies performed in Marshfield, off of the red cells, and on gel separator (except for drugs).

Routine chemistry gel stability studies performed at Rice Lake Center on samples collected and stored 8 days.

Immunoassay and drug stabilities from vendor literature and/or historic studies at Marshfield.

Frozen stability based on literature recommendations.

**CO2 : Decreases on average 1.5 mmol/day upon storage; do not accept aliquots beyond 2 days storage unless frozen.

***LDH : Serum is recommended, plasma is only stable for 24 hours at 2-8C or 12 hours at room temperature.