Blood biochemistry is currently outsourced to a third party. Below is a list of routine chemistries with the volume required for each test.

Abbreviation	Name	Sample Volume (µL)***
ALB	Albumin	3.5
ALP	ALP	8.0
ALT	ALT	7.0
AMY	Amylase	7.0
AST	AST	7.0
BIC	Bicarbonate	3.0
BAR	Bile Acids	5.0
BILC	Bilirubin (Conjugated)	10.8
BILT	Bilirubin (Unconjugated)	3.0
CAL	Calcium	7.0
CHO	Cholesterol	2.0
CK	CK	5.0
CRE	Creatinine	11.0
GGT	GGT	5.0
GLU	Glucose	2.0
ISE*	ISE Panel	15.0
LDH	LDH	5.0
LIP	Lipase	2.5
MAG	Magnesium	4.0
PHO	Phosphorus	4.0
TP	Total Protein	4.0
TRI	Triglycerides	2.0
URE	Urea	3.0
UA	Uric Acid	5.0
SEAP**	Serum Appearance	7.5

*ISE Panel includes Sodium, Potassium, Sodium/Potassium Ratio, and Chloride. The tests in the ISE Panel cannot be ordered separately

**Serum Appearance includes semi-quantitative assessment of Hemolysis, Icterus, and Lipemia, (not normally included in profiles for mice)

***In addition to sample volume please add dead volume of 30.0 µL and waste volume of 12.0 µL . Note which volumes are diluted. See below.

General Information

Please keep in mind that volume is a limiting factor. In general a maximum amount of 60 to 100 µL of plasma can be collected from a healthy adult mouse so not all chemistries can be measured on the same sample. Requests should be made in order of priority. During analysis, the first 12 µL is discarded to avoid cross-contamination. The requested parameters that require no dilution are then run. At least 30 µL must remain from which dilutions may be made for certain parameters. Bile Acids and Uric Acid are diluted 5x (10 µL sample into 40 µL saline) and enzymes (ALP, ALT, AMY, AST, CK, GGT,

LDH, LIP) are diluted 10x (10 μL sample into 90 μL saline) before analysis. Should an extreme level be expected for another parameter, a dilution could be requested (please contact us for more information).

Sample Collection

Plasma or serum samples are recommended. In the mouse physiology screening laboratory we typically collect mouse blood aerobically from the saphenous vein and prepare plasma by centrifugation at 12000 rpm for 5 minutes (refer to the Saphenous Vein Blood Collection Protocol). Frozen or fresh (keep on ice or at 4°C) samples are acceptable.

Price List – please contact for us for pricing information (flenniken@mshri.on.ca)