

### Small Mammal Reference Ranges: Chemistry

Determination	Ferret	Guinea Pig	Hamster	Mouse	Rat	Rabbit
Albumin (g/dL)	2.1-3.5	2.1-3.9	3.5-4.9	2.5-4.8	2.8-5.3	2.8-4.4
A/G ratio by machine	1.00-1.25	1.58-2.19	1.25-1.56	1.44-1.84	1.39-2.25	0.70-1.51
ALT (U/L)	60-137	29-124	22-128	29-191	36-80	27-108
AST (U/L)	60-122	--	--	--	--	21-80
Amylase (U/L)	30-43	--	--	--	--	77-117
BUN (mg/dL)	18-32	9-31	12-26	18-29	11-23	11-24
Ca (mg/dL)	7.9-10.5	7.8-10.5	5.3-12.0	8.7-10.1	5.7-12.4	9.5-14.0
Creat (mg/dL)	0.2-0.5	0.2-0.8	0.4-1.0	0.1-0.4	0.3-0.6	0.6-1.0
CPK (U/L)	55-136	--	--	--	--	88-214
Glu (mg/dL)	80-117	60-125	37-198	90-193	50-135	81-145
Phos (mg/dL)	5.1-6.8	3.0-5.3	3.0-9.9	5.4-9.3	6.5-12.2	3.5-6.0
Total Bili (mg/dL)	0.2-0.6	0.1-0.5	0.1-0.7	0.1-0.9	0.2-0.7	0.2-0.5
Total Protein (g/dL)	4.6-6.4	4.6-6.2	5.2-7.0	4.6-6.9	5.6-7.4	4.4-6.4

### Small Mammal Reference Ranges: Electrophoresis

Determination	Ferret	Guinea Pig	Hamster	Mouse	Rat	Rabbit
Albumin (g/dL)	2.50-3.31	2.17-2.59	--	2.13-3.35	3.35-4.09	2.38-4.24
Alpha-1 (g/dL)	0.33-0.56	0.24-0.43	--	0.25-0.46	0.40-0.59	0.32-0.71
Alpha-2 (g/dL)	0.36-0.60	0.51-0.72	--	0.75-1.10	0.20-0.57	0.52-1.18
Beta (g/dL)	0.83-1.20	0.27-0.39	--	1.42-1.73	1.33-1.69	0.49-1.22
Gamma (g/dL)	0.31-0.81	0.41-0.64	--	0.16-0.32	0.12-0.51	0.25-0.92
A/G ratio	1.05-1.33	0.92-1.29	--	0.7-1.1	1.10-1.62	0.80-2.11

All reference ranges obtained from 24 hour old heparinized plasma samples.

Regular chemistry performed on Ortho 250XR  
 TP by non-temperature compensated refractometer  
 EPH by Helena split beta gels

### Small Mammal Reference Ranges: Hematology

Determination	Ferret	Guinea Pig	Hamster	Mouse	Rat	Rabbit
WBC x 10 <sup>3</sup> /ul	4.3-10.7	5.5-14	6.3-8.9	4.5-9.1	4.7-9.4	4.3-12.9
RBC x 10 <sup>6</sup> /ul	7.01-9.65	4.39-6.05	6.51-7.52	7.51-9.66	6.36-8.21	4.74-7.31
Hemoglobin g/dL	12.2-16.5	11.5-15.2	15.2-17.4	12.8-16.1	11.2-15.9	9.4-14.9
HCT (%)	36-48	43-52	45-52	34-50	33-47	34-45
MCV (fL)	50-54	54-63	68-74	41-60	56-59	52-67
MCH (g/dL)	15-18	16-19	19-24	13-19	15-20	17-23
MCHC (g/dl)	32-35	26-34	30-34	30-39	31-37	29-37
Neuts %	18-47	28-47	16-26	21-57	7-32	28-60
Lymph %	41-73	39-60	65-80	49-82	57-91	38-68
Mono %	0-4	0-3	0-4	2-8	2-5	0-3
Eos %	0-4	0-3	0-2	0-3	0-4	0-3
Baso %	0-2	0-3	0-2	0-3	0-3	0-2
Platelets (x 10 <sup>3</sup> /ml)	200-459	79-258	--	421-733	411-626	162-571

Automated analyzer for counts, Hb, HCT

Diff based on 100 cell count using smear made at the time of sample acquisition