

Bird/Rabbit/Guinea Pig Clinical Chemistry

Enzymes 25°C	Unit	Parakeet	Amazona and amazone-like Bird	Parrot	Rabbit	Guinea Pig
α-Amylase	U/l	–	100-600	200-600	< 459	< 3159
ALT (GPT)	U/l	–	–	–	< 61	< 61
AP	U/l	–	–	–	< 397	< 418
AST (GOT)	U/l	86-390	100-400	100-400	< 28	< 90
Cholinesterase	U/l	–	2000-4000	2500-12000	–	–
CK	U/l	–	100-500	130-400	< 958	< 2143
γ-GT	U/l	–	–	–	< 13	< 13
GLDH	U/l	–	–	–	< 19	< 17
LDH	U/l	76-450	150-400	150-400	–	–
Lipase	U/l	–	–	–	< 1587	< 152
Substrates	Unit	Parakeet	Amazona and amazone-like Bird	Parrot	Rabbit	Guinea Pig
Albumin	g/l	–	–	–	36-57	–
Cholesterol	mmol/l	–	–	< 5,2	0,3-1,7	0,3-1,7
Fructosamine	µmol/l	–	–	–	< 527	< 271
Bile Acids	µmol/l	< 100	20-150	20-100	–	–
Total Protein	g/l	22-50	26-50	26-46	49-74	44-66
Uric Acid	µmol/l	190-833	70-500	100-500	–	–
Urea (BUN)	mmol/l	–	–	–	2,1-8,4	3,3-10,3
Creatinine	µmol/l	–	–	–	34-166	< 77
Triglycerides	mmol/l	–	–	–	0,5-3,4	0,3-2,4
Minerals / Electrolytes	Unit	Parakeet	Amazona and amazone-like Bird	Parrot	Rabbit	Guinea Pig
Calcium	mmol/l	1,7-2,8	2,0-3,5	1,75-3,5	3,1-3,9	2,4-3,1
Iron	µmol/l	–	–	–	20-59	26-76
Potassium (K)	mmol/l	2,5-4,5	2,0-4,5	2,4-4,2	3,7-6,3	4,5-8,8
Magnesium	mmol/l	–	–	–	0,9-1,7	1,0-2,6
Sodium (Na)	mmol/l	130-150	125-160	135-165	138-155	130-150
Phosphate	mmol/l	0,8-2,5	0,3-1,8	0,35-2,0	0,8-3,2	1-7

Haematology

	Unit	Parakeet	Amazona and amazone-like Bird	Parrot	Rabbit	Guinea Pig
Erythrocytes	T/l	3,2-4,8	1,8-2,6	2,7-3,6	5,9-8,1	4,51-6,36
Haematocrit	l/l	0,48-0,58	0,44-0,55	0,43-0,51	0,36-0,55	0,39-0,55
Haemoglobin	g/l	138-168	135-200	142-171	113-171	117-169
Leukocytes	G/l	1,0-7,7	1,5-11,6	3,3-10,3	3,0-11,9	2,9-14,4
Neutrophils/ Pseudoeosinophile	%	–	–	–	15-60	12-62
Heterophils	%	20-26	50-58	56-57	–	–
Lymphocytes	%	58-68	33-43	36-37	32-81	28-84
Monocytes	%	12-19	0-2	0-1	0-12	0-9
Eosinophils	%	1-4	2-4	2-3	0-1	0-14
Basophils	%	4-9	1-5	4-5	0-7	0-2
Bands	%	–	–	–	0	0-1
Hypochromasia		neg.	neg.	neg.	neg.	neg.
Anisocytosis		neg.	neg.	neg.	neg.	neg.
Thrombocytes	G/l	34,4-38,4	–	46-49	193-725	273-745

Dog/Cat Haematology

	Unit	Dog	Cat
Erythrocytes	T/l	5,5-8,5	5,0-10,0
Haematocrit	l/l	0,44-0,52	0,30-0,44
Haemoglobin	g/l	150-190	90-150
Leukocytes	G/l	6-12	6-11
Neutrophils	%	55-75	60-78
Lymphocytes	%	13-30	15-38
Monocytes	%	0-4	0-4
Eosinophils	%	0-6	0-6
Basophils	%	0	0-1
Bands	%	0-4	0-4
Hypochromasia		neg.	neg.
Anisocytosis		neg.	neg.
Thrombocytes	G/l	150-500	180-550
Reticulocytes	/nl	< 60	< 30

Endocrinology

	Unit	Dog	Cat
T4	µg/dl	1,3-4,5	0,9-2,9
ft4	pgmol/l	7,7-47,6	6,4-33,3
T3	ng/ml	20-206	33-167
ft3	pmol/l	3,7-9,2	0,8-1,4
TSH	ng/ml	< 0,6	–
TSH	µU/ml	–	> 0,04
Oestradiol	pg/ml	Prooestrus: 25-65 Oestrus: < 25 Anoestrus: < 30 Neutered: < 10 Male: < 15 Sertoli cell tumour: >30	Interoestrus: < 20pg/ml Oestrus: 20-60 – Neutered: <0,5 (1,0) –
Progesterone	ng/ml	Prooestrus: <1,0 Oestrus: < 30 Ovulation: 5,5-12 Anoestrus/ Neutered: <1,0	preov: <1,0 postov: >1,0 – –
Testosterone	ng/ml	Male: 1,5-8,5 Female: <0,4 M-Neutered: <0,5	Male: 2,5-7,0 – Neutered: <0,5
Cortisol	ng/ml	5-65	3-50 (130)
ACTH	pg/ml	6-58	< 110
Insulin	ng/ml	8-25	10-30

Additional Parameters

	Unit	Dog	Cat
PLI	µg/l	<200 (quest.: 200-400)	<3,5 (quest.: 3,5-5,4)
TLi	µg/l	>5 (quest.: 2,5-5)	12,0-82,0
Vitamin B12	pg/ml	300-800	300-800
Folic Acid	ng/ml	3,0(4,0)-10,0	3,0-10,0

Dog/Cat Clinical Chemistry

Enzymes 25°C	Unit	Dog	Cat
α-Amylase	U/l	< 1650	< 1850
α-HBDH	U/l	< 50	< 97
ALT (GPT)	U/l	< 55	< 70
AP	U/l	< 108	< 140
AST (GOT)	U/l	< 25	< 30
Cholinesterase	U/l	1500-3000	1000-3000
CK	U/l	< 90	< 130
γ-GT	U/l	< 5	< 5 (prel.)
GLDH	U/l	< 6	< 6
LDH	U/l	< 100	< 70
Lipase	U/l	< 120	< 26
Substrates	Unit	Dog	Cat
β-HBS	mmol/l	< 0,6	< 0,6
Bilirubin	µmol/l	< 3,4	< 3,4
Cholesterol	mmol/l	3,1-10,1	1,8-3,9
Fructosamine	µmol/l	< 374	< 340
Bile Acids	µmol/l	< 20, postprandial <40	< 20, postprandial <40
Total Protein	g/l	54-75	57-94
Albumin	g/l	25-44	26-56
Globulins	g/l	25-45	28-55
A/G-ratio	A/G	0,59-1,11	0,6-1,2
Glucose	mmol/l	3,05-6,1	3,1-6,9
Urea (BUN)	mmol/l	3,3-8,3	5,0-11,3
Creatinine	µmol/l	35-106	< 168
Lactate	mmol/l	0,5-3,0	< 1,0
SDMA	µmol/l	< 0,65	< 0,75
Triglycerides	mmol/l	< 3,9	< 1,14
Minerals / Electrolytes	Unit	Dog	Cat
Calcium	mmol/l	2,3-3,0	2,3-3,0
Chloride	mmol/l	96-113	110-130
Iron	µmol/l	15-45	8-31
Potassium (K)	mmol/l	3,5-5,1	3,0-4,8
Copper	µmol/l	15,7-18,9	13,4-16,9
Magnesium	mmol/l	0,6-1,3	0,6-1,3
Sodium (Na)	mmol/l	140-155	145-158
Phosphate	mmol/l	0,7-1,6	0,8-1,9
Zinc	µmol/l	7,7-19,9	12,2-15,3

Reference Values

Adult animals