

**CLINICAL BIOCHEMISTRY REFERENCE VALUES<sup>a</sup>**

SPECIES	Glucose mmol/L	Urea mmol/L	Cholesterol Total mmol/L	Protein			Aspartate Amino- transferase (AST, SGOT) U/L	Alanine Amino- transferase (ALT, SGPT) U/L	Alkaline Phosphatase U/L
				Total g/L	Albumin g/L	Globulin g/L			
CAT <sup>b</sup>	3.89-6.1 1 (5.05±0.42)	14.28-21. 42	2.46-3.3 7	54-7 8 (66±7)	21-33 (27±2)	26-51 (39±7)	26-43 (35±9)	6-83 (26±16)	25-93 (50±35)
CHICKEN <sup>b</sup>		(9.30)		(56)	(25)	(31)	(175)		
COW <sup>b</sup>	2.5-4.16 (3.19±0.38)	14.28-21. 42	2.07-3.1 1	67-7 5 (71±2)	30-35 (33±1)	30-35 (32±2)	78-132 (105±27)	14-38 (27±14)	0-488 (194±126)
DOG <sup>b</sup>	3.61-6.5 5 (5.05±0.67)	7.14-19.9 9 (12.14±2.86)	3.50-6.9 9 (4.61±0.98)	54-7 1 (61±5)	26-33 (29±2)	27-44 (34±5)	23-66 (33±12)	21-102 (47±26)	20-156 (66±36)
GOAT <sup>b</sup>	2.78-4.1 6 (3.49±0.39)	7.14-14.2 8 (10.71±1.43)	2.07-3.3 7	64-7 0 (69±5)	27-39 (33±3)	27-41 (36±5)	167-51 3	24-83	93-387 (219±76)
GUINEA PIG <sup>c</sup> Hartley (500-800g)	4.94-5.2 9 (5.12)	15.35-17. 99 (16.67)		48-5 6 (52)	24-27 (25)		46-48 (47)	38-45 (41)	66-74 (70)
HAMSTER <sup>c</sup> Syrian (100g)	3.61-4.0 7 (3.84)	14.85-21. 49 (18.333.08)	4.71-6.1 3 (5.42)	64-7 3 (675)	32-37 (352)		53-124 (7932)	21-50 (3511)	8-18 (135)
HORSE <sup>b</sup>	4.16-6.3 9	7.14-17.1 4	1.94-3.8 9	52-7 9	26-37 (31±)	26-40 (33±)	226-36 6	3-23 (14±11)	143-395 (244±10)

	(5.30±0.47)		(2.88±0.04)	(63±6)	3)	7)	(296±70)	)	1)
MOUSE <sup>d</sup> CD-1 [CrI:CD-1(ICR)BR] <sup>e</sup>	9.71-18.60 (15.00)	12.14-20.59 (16.07)	1.27-2.48 (1.89)	42-60 (51)	21-34 (28)	18-82 (22)	55-251 (139)	28-184 (95)	28-94 (67)
CF-1 [CrI:CF-1BR] <sup>e</sup>	9.10-20.48 (14.46)	8.57-19.99 (14.99)	2.72-4.16 (3.49)	54-65 (60)	30-40 (35)	18-31 (24)	30-314 (177)	76-208 (143)	67-303 (167)
B6C3F1 [B6C3F1/CrIBR] <sup>f</sup>	7.6-26.0 (17.3)	4.3-13.5 (7.85)	1.53-3.63 (2.29)	47-60 (52)	26-34 (30)	17-29 (22)	0-111 (43)		46-289 (207)
NON-HUMAN PRIMATE Baboon ( <i>Papio</i> sp) <sup>c</sup>	(6.72±1.16)			(63±6)	(37±4)		(25±3)	(16±4)	
Cynomolgus ( <i>M. fascicularis</i> ) <sup>g</sup>	2.20-4.70	3.80-10.00	1.91-4.52	68-86	34-45	27-47	9-68	0-138	102-1163
Rhesus ( <i>M. mulatta</i> ) <sup>c</sup>	(3.89±0.57)	12.07-14.85 (13.46)	3.31-4.43 (3.87)	66-80 (70±8)	43-44		27-79 (55±27)	27-42 (35)	(149)
PIG <sup>b</sup>	4.72-8.33 (6.61±0.96)	7.41-21.42	0.93-1.40	79-89 (84±7)		53-64 (59±6)	32-84 (61±26)	31-58 (45±14)	118-395 (194±84)
RABBIT <sup>b</sup>	2.78-5.18 (4.08±0.53)		0.14-1.86 (0.69±0.41)						
RAT <sup>d</sup> Wistar[CrI:(W)BR] <sup>h</sup>	4.71-7.33 (6.22)	11.42-19.28 (14.64)	1.20-2.38 <sup>f</sup> (1.79)	63-86 (73)	33-49 (47)	24-39 (31)	39-92 (64)	17-50 (32)	39-216 (123)
F-344 <sup>i</sup>	4.24-20.	7.85-19.9	0.54-2.2	60-7	34-43	24-35	56-436	108-37	147-399

[CDF(F-344)CrIBR]	04 (10.85)	9 (10.00)	2 (1.29)	8 (66)	(39)	(29)	(233)	5 (232)	(248)
CD[CrI:CD(SD)BR] <sup>j</sup>	5.55-16.71 (11.69)	9.28-22.13 (14.64)	1.18 (0.52-1.914)	59-79 (70)	28-44 (38)	26-39 (32)	39-262 (129)	110-274 (216)	46-264 (161)
SHEEP <sup>b</sup>	2.78-4.44 (3.80±0.33)	5.71-14.28 (8)	1.34-1.97 (1.66±0.31)	60-79 (72±5)	24-30 (27±2)	35-57 (44±5)	(307±43)	(30±4)	68-387 (178±102)

<sup>a</sup> Ranges with the means and standard deviations in parenthesis. Reported in S.I. units.

<sup>b</sup> KANEKO, J.J., ed. Clinical chemistry of domestic animals. Academic Press, 1989: 886-891.

<sup>c</sup> LOEB, W.F. and QUIMBY, F.W., eds. The Clinical Chemistry of Laboratory Animals. Pergamon Press, 1989: 417-476.

<sup>d</sup> Sexes combined, 19-21 weeks.

<sup>e</sup> Baseline haematology and clinical chemistry values for Charles River outbred mice: CrI:CD-1(ICR)BR. CrI:CF-1BR. Charles River Laboratories Techn. Bull., 1986.

<sup>f</sup> Values from Parke Davis Research Institute, Mississauga, Ontario.

<sup>g</sup> CLARKE, D., TUPASI, G., WALKER, R. and SMITH, G. Stability of serum biochemical parameters in Beagle Dogs and Cynomolgus monkeys. Clin. Chem. Newsl. (In press).

<sup>h</sup> Baseline haematology and clinical chemistry values for Charles River Wistar rats (CRL:(W)BR) as a function of sex and age. Charles River Techn. Bull., Vol. 1, No. 2, 1982.

<sup>i</sup> Baseline haematology and clinical chemistry values for Charles River Fischer-344 rats - CDF(F-344)CrIBR as a function of sex and age. Charles River Techn. Bull., Vol. 3, No. 1, 1984.

<sup>j</sup> Baseline haematology and clinical chemistry values for Charles River CD[CrI:CD(SD)BR] rats as a function of sex and age. Charles River Techn. Bull., Vol. 3, No. 2, 1984.

(摘自 **GUIDE TO THE CARE AND USE OF EXPERIMENTAL ANIMALS**)