

Taxonomy : Elephas maximus / Asian elephant

Sex Type : All Sex types

Age Grouping : All Ages

Restraint Type : All Restraint types

HEMATOLOGY

Expected Result Type	Test	Units	Reference Interval	Mean	Median	Lowest Data Value	Highest Data Value	Sample Size	Animals	Sample Type
Basic Stats	Estimated Segmented Neutrophil absolute count (reported)	*10 ⁹ cells/L	N/A - N/A	3.56	3.30	1.19	5.30	25	2	Whole Blood
Basic Stats	Estimated Heterophil absolute count (reported)	*10 ⁹ cells/L	N/A - N/A	2.894	2.622	1.290	5.664	23	11	Whole Blood
Local RI	Platelet - large cell ratio (automated.reported)	%	1.2 - 9.6	5.2	5.1	0.1	10.1	55	6	Whole Blood
Global sp RI	Red Blood Cell count (automated)	*10 ¹² cells/L	2.07 - 3.70	2.78	2.74	0.99	4.62	12852	311	Whole Blood
Global sp RI	Red Blood Cell count (manual)	*10 ¹² cells/L	2.09 - 4.06	2.86	2.80	1.07	4.63	576	96	Whole Blood
Global sp RI	Hemoglobin (automated)	g/L	91 - 160	121	120	44	201	13690	332	Whole Blood
Global sp RI	Hematocrit (automated)	L/L	0.242 - 0.455	0.335	0.332	0.109	0.570	12641	310	Whole Blood
Global sp RI	Hematocrit (manual)	L/L	0.270 - 0.440	0.342	0.340	0.160	0.510	6615	217	Whole Blood
Global sp RI	Mean Corpuscular Volume (reported)	fL	97.6 - 146.0	119.6	120.0	55.0	178.9	8898	210	Whole Blood
Global sp RI	Mean Corpuscular Volume (calculated)	fL	101.7 - 142.4	122.9	123.7	82.5	160.6	4318	195	Whole Blood
Global sp RI	Mean Corpuscular Hemoglobin (reported)	fmol	2.14 - 3.53	2.69	2.66	1.49	3.97	8494	186	Whole Blood
Global sp RI	Mean Corpuscular Hemoglobin (calculated)	pg	35.1 - 51.0	43.8	44.0	28.3	59.4	4515	211	Whole Blood
Global sp RI	Mean Corpuscular Hemoglobin Concentration (reported)	g/L	299 - 462	367	370	233	534	8687	202	Whole Blood
Global sp RI	Mean Corpuscular Hemoglobin Concentration (calculated)	g/L	304 - 411	355	354	249	457	4616	211	Whole Blood
Global sp RI	Red Cell Distribution Width (automated)	%	12.5 - 17.5	14.7	14.6	9.5	20.2	4154	119	Whole Blood
Global sp RI	Red Cell Distribution Width - Standard deviation (automated)	fL	53.6 - 79.0	65.2	65.6	37.6	91.4	432	22	Whole Blood
Global sp RI	Nucleated Red Blood Cells (automated)	/100 WBC	0 - 2	0	0	0	4	749	113	Whole Blood
Global sp RI	Nucleated Red Blood Cells (manual)	/100 WBC	0 - 2	1	1	0	3	192	36	Whole Blood
Global sp RI	Reticulocyte percentage (automated)	%	0.1 - 0.4	0.2	0.2	0.1	0.6	1159	41	Whole Blood
Basic Stats	Reticulocyte percentage (manual)	%	N/A - N/A	0.1	0.0	0.0	0.5	22	16	Whole Blood
Global sp RI	Reticulocyte absolute count (automated)	*10 ⁹ cells/L	2.100 - 11.400	5.298	4.900	0.000	14.100	870	26	Whole Blood
Global sp RI	Corrected Reticulocyte absolute count (reported.automated)	*10 ⁹ cells/L	2.197 - 12.805	7.361	7.000	0.000	18.500	318	18	Whole Blood
Global sp RI	Erythrocyte sedimentation rate (automated)	mm/hr	51 - 134	99	106	51	135	45	10	Whole Blood
Global sp RI	Platelet count (automated)	*10 ¹² cells/L	0.113 - 0.885	0.389	0.356	0.000	1.375	9939	251	Whole Blood
Global sp RI	Platelet count (manual)	*10 ¹² cells/L	0.388 - 1.389	0.815	0.784	0.001	1.900	674	23	Whole Blood
Global sp RI	Platelet Distribution Width (automated)	%	26.7 - 38.0	29.3	28.5	25.3	39.0	1161	22	Whole Blood
Global sp RI	Platelet Distribution Width - Standard Deviation (automated)	fL	5.5 - 8.1	6.6	6.6	4.6	8.6	1361	41	Whole Blood
Global sp RI	Mean Platelet Volume (automated)	fL	3.5 - 10.0	6.7	6.3	2.8	12.2	3929	84	Whole Blood
Global sp RI	White Blood Cell count (automated)	*10 ⁹ cells/L	6.7 - 20.6	13.0	12.7	0.3	27.7	12739	335	Whole Blood
Global sp RI	White Blood Cell count (direct.manual)	*10 ⁹ cells/L	5.51 - 20.00	12.12	11.73	1.90	30.40	2841	50	Whole Blood
Global sp RI	White Blood Cell count (indirect.manual)	*10 ⁹ cells/L	6.33 - 20.52	12.80	12.56	0.25	28.10	15588	343	Whole Blood
Global sp RI	Estimated White Blood Cell count (manual)	*10 ⁹ cells/L	0 - 23	9	8	0	25	185	31	Whole Blood
Global sp RI	Lymphocyte absolute count (automated)	*10 ⁹ cells/L	0.00 - 6.96	1.97	1.50	0.00	9.62	4240	145	Whole Blood
Global sp RI	Lymphocyte absolute count (manual)	*10 ⁹ cells/L	0.52 - 9.90	4.48	4.10	0.00	13.50	912	36	Whole Blood

Global sp RI	Lymphocyte absolute count (calculated)	*10^9 cells/L	0.728 - 10.010	3.697	3.090	0.000	13.386	7377	235	Whole Blood
Global sp RI	Lymphocytes with granules absolute count (manual)	*10^9 cells/L	0.98 - 7.43	2.88	2.60	0.85	7.68	58	7	Whole Blood
Global sp RI	Monocyte absolute count (automated)	*10^9 cells/L	0.002 - 13.898	5.246	4.760	0.000	29.000	4507	143	Whole Blood
Global sp RI	Monocyte absolute count (manual)	*10^9 cells/L	0.001 - 10.559	5.020	5.400	0.000	14.193	200	36	Whole Blood
Global sp RI	Monocyte absolute count (calculated)	*10^9 cells/L	0.154 - 10.909	4.860	4.953	0.000	20.402	7177	242	Whole Blood
Global sp RI	Segmented Neutrophil absolute count (automated)	*10^9 cells/L	0.00 - 12.22	3.83	3.12	0.00	16.00	3751	126	Whole Blood
Global sp RI	Segmented Neutrophil absolute count (manual)	*10^9 cells/L	0.00 - 8.42	3.57	3.43	0.00	9.10	222	42	Whole Blood
Global sp RI	Segmented Neutrophil absolute count (calculated)	*10^9 cells/L	0.927 - 9.657	3.949	3.444	0.000	11.988	6295	227	Whole Blood
Global sp RI	Band form Neutrophil absolute count (automated)	*10^9 cells/L	0.00 - 1.10	0.15	0.00	0.00	2.90	711	93	Whole Blood
Basic Stats	Band form Neutrophil absolute count (manual)	*10^9 cells/L	N/A - N/A	0.15	0.00	0.00	0.94	36	12	Whole Blood
Global sp RI	Band form Neutrophil absolute count (calculated)	*10^9 cells/L	0.000 - 0.942	0.165	0.104	0.000	1.296	1684	132	Whole Blood
Basic Stats	Heterophil absolute count (manual)	*10^9 cells/L	N/A - N/A	3.308	3.450	0.003	7.650	26	8	Whole Blood
Global sp RI	Heterophil absolute count (calculated)	*10^9 cells/L	1.827 - 6.243	3.446	3.310	1.066	7.606	949	26	Whole Blood
Basic Stats	Immature heterophil absolute count (reported)	*10^9 cells/L	N/A - N/A	0.019	0.017	0.000	0.100	39	8	Whole Blood
Global sp RI	Eosinophil absolute count (automated)	*10^9 cells/L	0.000 - 0.650	0.216	0.178	0.000	0.920	3704	140	Whole Blood
Global sp RI	Eosinophil absolute count (manual)	*10^9 cells/L	0.000 - 0.786	0.188	0.130	0.000	1.200	176	30	Whole Blood
Global sp RI	Eosinophil absolute count (calculated)	*10^9 cells/L	0.000 - 0.930	0.288	0.228	0.000	1.323	5622	217	Whole Blood
Global sp RI	Basophil absolute count (automated)	*10^9 cells/L	0.000 - 0.142	0.024	0.000	0.000	0.230	1745	149	Whole Blood
Global sp RI	Basophil absolute count (manual)	*10^9 cells/L	0.000 - 0.130	0.006	0.000	0.000	0.168	159	24	Whole Blood
Global sp RI	Basophil absolute count (calculated)	*10^9 cells/L	0.000 - 0.260	0.040	0.000	0.000	0.496	2151	130	Whole Blood
Global sp RI	Lymphocyte percentage (automated)	%	1.0 - 65.4	21.9	20.0	0.0	85.7	5775	150	Whole Blood
Global sp RI	Lymphocyte percentage (manual)	%	6.0 - 69.0	27.7	24.0	0.0	92.9	7666	262	Whole Blood
Global sp RI	Monocyte percentage (automated)	%	0.6 - 78.0	38.6	44.0	0.0	91.0	5891	153	Whole Blood
Global sp RI	Monocyte percentage (manual)	%	1.0 - 70.5	37.8	43.0	0.0	139.6	7425	263	Whole Blood
Global sp RI	Bi-lobed monocytes:total monocytes ratio	ratio	15.00 - 66.15	46.82	49.00	2.50	74.00	587	9	Whole Blood
Basic Stats	Azurophil percentage (manual)	%	N/A - N/A	6.0	0.0	0.0	47.0	34	17	Whole Blood
Global sp RI	Segmented Neutrophil percentage (automated)	%	1.9 - 72.0	26.5	24.1	0.0	78.0	5024	132	Whole Blood
Global sp RI	Segmented Neutrophil percentage (manual)	%	10.0 - 70.0	31.4	28.0	0.0	82.0	5624	240	Whole Blood
Global sp RI	Band form Neutrophil percentage (automated)	%	0.0 - 7.0	0.9	0.0	0.0	12.0	1347	61	Whole Blood
Global sp RI	Band form Neutrophil percentage (manual)	%	0.0 - 5.0	0.7	0.0	0.0	8.0	2473	200	Whole Blood
Global sp RI	Heterophil percentage (automated)	%	13.0 - 47.0	25.8	24.0	2.7	60.0	1740	49	Whole Blood
Global sp RI	Heterophil percentage (manual)	%	13.0 - 47.0	25.8	24.0	6.2	60.0	1735	46	Whole Blood
Basic Stats	Immature heterophil percentage (manual)	%	N/A - N/A	0.1	0.1	0.0	0.4	37	8	Whole Blood
Global sp RI	Eosinophil percentage (automated)	%	0.0 - 6.0	2.0	2.0	0.0	9.0	4251	132	Whole Blood
Global sp RI	Eosinophil percentage (manual)	%	0.0 - 7.0	2.2	2.0	0.0	9.0	6244	251	Whole Blood
Global sp RI	Basophil percentage (automated)	%	0.0 - 1.0	0.2	0.0	0.0	2.0	2545	135	Whole Blood
Global sp RI	Basophil percentage (manual)	%	0.0 - 1.3	0.2	0.0	0.0	4.0	3818	207	Whole Blood

TOXICOLOGY

Expected Result Type	Test	Units	Reference Interval	Mean	Median	Lowest Data Value	Highest Data Value	Sample Size	Animals	Sample Type
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Basic Stats	Gamma Globulin (capillary zone electrophoresis)	g/L	N/A - N/A	15.0	14.7	8.0	20.2	24	8	or plasma
Global sp RI	Symmetric dimethylarginine (high precision liquid chromatography - mass spectrometry)	µmol/L	0.25 - 0.64	0.43	0.44	0.20	0.99	118	12	Serum or plasma
Global sp RI	Iron (fluid.inductively coupled plasma - atomic emission spectrometry)	µmol/L	1.8 - 22.0	10.7	10.6	0.0	28.8	1322	117	Serum
Global sp RI	Sodium (automated)	mmol/L	124 - 138	130	130	116	144	6607	294	Serum
Global sp RI	Sodium (automated)	mmol/L	124 - 136	130	131	120	138	229	60	Whole Blood
Global sp RI	Sodium (automated)	mmol/L	119 - 139	130	130	112	143	354	94	Plasma
Global sp RI	Potassium (automated)	mmol/L	3.4 - 5.5	4.4	4.4	2.8	6.1	229	61	Whole Blood
Global sp RI	Potassium (automated)	mmol/L	3.8 - 5.7	4.6	4.5	2.9	6.3	6529	292	Serum
Global sp RI	Potassium (automated)	mmol/L	3.7 - 6.4	4.6	4.5	3.0	6.9	357	98	Plasma
Global sp RI	Sodium:Potassium ratio (reported)	ratio	23.0 - 34.0	28.4	28.3	18.0	39.0	2523	116	Serum
Global sp RI	Sodium:Potassium ratio (reported)	ratio	21.0 - 38.8	29.2	29.0	21.0	43.0	87	21	Plasma
Global sp RI	Sodium:Potassium ratio (calculated)	ratio	21.3 - 34.5	28.7	28.9	17.0	40.6	3123	197	Serum
Global sp RI	Sodium:Potassium ratio (calculated)	ratio	20.4 - 36.0	28.4	29.0	19.9	37.2	54	40	Plasma
Global sp RI	Chloride (automated)	mmol/L	80 - 99	90	90	74	106	290	79	Plasma
Global sp RI	Chloride (automated)	mmol/L	85 - 99	91	91	83	99	165	39	Whole Blood
Global sp RI	Chloride (automated)	mmol/L	84 - 100	91	91	71	112	6234	256	Serum
Global sp RI	Total Carbon Dioxide (automated)	mmol/L	18.0 - 31.5	23.1	23.0	17.0	33.0	84	39	Plasma
Global sp RI	Total Carbon Dioxide (automated)	mmol/L	19.0 - 30.0	24.5	24.0	14.0	35.0	2524	159	Serum
Global sp RI	Total Carbon Dioxide (automated)	mmol/L	22.0 - 32.0	27.4	27.0	19.0	34.0	184	47	Whole Blood
Global sp RI	Anion Gap (reported)	mmol/L	12.3 - 22.0	17.9	18.0	10.2	23.0	131	28	Whole Blood
Global sp RI	Anion Gap (reported)	mmol/L	12.0 - 27.0	18.9	19.0	6.0	33.0	1305	97	Serum
Global sp RI	Anion Gap (reported)	mmol/L	14.0 - 28.9	19.4	19.0	14.0	29.0	40	26	Plasma
Global sp RI	Calcium (colorimetry.automated)	mmol/L	2.2 - 2.9	2.7	2.6	1.7	3.0	88	26	Whole Blood
Global sp RI	Calcium (colorimetry.automated)	mmol/L	2.3 - 3.0	2.6	2.6	1.9	3.4	6975	301	Serum
Global sp RI	Calcium (colorimetry.automated)	mmol/L	2.2 - 3.3	2.7	2.7	1.5	3.9	1518	110	Plasma
Global sp RI	Calcium (fluid.inductively coupled plasma mass spectrometry)	mmol/L	2.013 - 3.200	2.666	2.700	2.000	3.200	44	10	Serum or plasma
Global sp RI	Calcium (fluid.inductively coupled plasma mass spectrometry)	mmol/L	2.002 - 3.200	2.658	2.700	2.000	3.200	40	9	Serum
Global sp RI	Phosphorus (colorimetry.automated)	mmol/L	1.03 - 2.24	1.65	1.65	0.44	2.87	1414	106	Plasma
Global sp RI	Phosphorus (colorimetry.automated)	mmol/L	1.00 - 2.39	1.61	1.58	0.00	3.26	6622	290	Serum
Global sp RI	Phosphorus (colorimetry.automated)	mmol/L	1.03 - 2.28	1.58	1.58	0.81	2.39	74	27	Whole Blood
Global sp RI	Phosphorus (fluid.inductively coupled plasma mass spectrometry)	mmol/L	1.0 - 2.4	1.6	1.6	0.0	3.3	6635	290	Serum
Global sp RI	Phosphorus (fluid.inductively coupled plasma mass spectrometry)	mmol/L	1.0 - 2.4	1.6	1.6	0.1	3.1	8048	313	Serum or plasma
Global sp RI	Calcium:Phosphorus ratio (reported)	ratio	1.3 - 3.1	2.0	1.9	0.2	4.0	1156	37	Serum or plasma
Global sp RI	Calcium:Phosphorus ratio (reported)	ratio	1.3 - 3.1	2.0	1.9	0.2	4.0	1152	36	Serum
Global sp RI	Calcium:Phosphorus ratio (calculated)	ratio	1.3 - 3.5	2.2	2.1	0.0	4.5	3730	199	Serum
Global sp RI	Calcium:Phosphorus ratio (calculated)	ratio	1.1 - 3.3	1.9	1.8	0.0	3.9	448	47	Plasma
Global sp RI	Ionized Calcium (automated)	mmol/L	0.25 - 1.63	0.66	0.35	-0.05	2.10	113	36	Serum
Global sp RI	Ionized Calcium (automated)	mmol/L	0.27 - 1.48	0.71	0.36	0.24	1.67	172	41	Whole Blood
Global sp RI	Ionized Calcium (automated)	mmol/L	0.17 - 1.29	0.59	0.31	0.17	1.29	57	9	Plasma
Global sp RI	Magnesium (automated)	mmol/L	0.70 - 1.23	0.93	0.92	0.27	1.64	2457	180	Serum
Global sp RI	Magnesium (automated)	mmol/L	0.62 - 1.13	0.92	0.93	0.49	1.34	491	44	Plasma
Basic Stats	Magnesium (fluid.inductively coupled plasma mass spectrometry)	mmol/L	N/A - N/A	1.0	1.0	0.0	1.3	17	8	Serum or plasma
Global sp RI	Glucose (colorimetry.automated)	mmol/L	2.20 - 7.63	4.90	4.94	1.30	8.82	310	103	Plasma
Global sp RI	Glucose (colorimetry.automated)	mmol/L	2.89 - 6.83	4.68	4.61	0.83	8.55	6843	284	Serum
Global sp RI	Glucose (colorimetry.automated)	mmol/L	2.96 - 8.35	5.30	5.18	1.50	8.80	218	59	Whole Blood
Basic Stats	Fructosamine (automated)	µmol/L	N/A - N/A	384	386	222	548	35	16	Serum
Global sp RI	Fructosamine (automated)	µmol/L	168 - 532	338	329	162	548	50	20	Serum or plasma
Global sp RI	Urea Nitrogen (colorimetry.automated)	mmol/L	1.7 - 6.8	3.8	3.5	1.3	8.2	192	52	Whole Blood
Global sp RI	Urea Nitrogen (colorimetry.automated)	mmol/L	1.7 - 7.1	3.7	3.5	0.9	8.6	379	109	Plasma
Global sp RI	Urea Nitrogen (colorimetry.automated)	mmol/L	1.8 - 6.4	4.0	3.9	0.0	8.9	7013	301	Serum

Global sp RI	Creatinine (automated)	µmol/L	62 - 186	118	115	0	243	6679	297	Serum
Global sp RI	Creatinine (automated)	µmol/L	62 - 167	110	107	18	203	382	109	Plasma
Global sp RI	Creatinine (automated)	µmol/L	71 - 179	117	115	44	203	174	42	Whole Blood
Global sp RI	Urea Nitrogen:Creatinine ratio (reported)	ratio	4.2 - 57.3	24.6	16.7	4.0	58.2	47	17	Plasma
Global sp RI	Urea Nitrogen:Creatinine ratio (reported)	ratio	4.0 - 67.5	22.1	12.2	0.0	121.2	2836	124	Serum
Global sp RI	Urea Nitrogen:Creatinine ratio (calculated)	ratio	14.8 - 77.0	34.6	34.7	3.2	80.8	87	54	Plasma
Global sp RI	Urea Nitrogen:Creatinine ratio (calculated)	ratio	14.1 - 63.8	34.4	33.1	0.4	94.1	3826	192	Serum
Global sp RI	Uric Acid (automated)	µmol/L	14 - 30	22	24	12	30	53	11	Plasma
Global sp RI	Uric Acid (automated)	µmol/L	0 - 59	11	6	0	71	760	86	Serum
Global sp RI	Alanine Aminotransferase (automated)	U/L	0 - 21	6	5	0	24	200	56	Plasma
Global sp RI	Alanine Aminotransferase (automated)	U/L	0 - 21	6	4	-2	30	3577	255	Serum
Global sp RI	Aspartate Aminotransferase (automated)	U/L	7 - 38	18	17	0	49	5597	292	Serum
Global sp RI	Aspartate Aminotransferase (automated)	U/L	8 - 45	23	23	8	46	47	17	Whole Blood
Global sp RI	Aspartate Aminotransferase (automated)	U/L	9 - 47	20	18	1	54	269	92	Plasma
Global sp RI	Lactate Dehydrogenase (automated)	U/L	178 - 1377	509	411	7	1785	1889	189	Serum
Basic Stats	Lactate Dehydrogenase (automated)	U/L	N/A - N/A	422	369	3	1410	29	12	Whole Blood
Global sp RI	Lactate Dehydrogenase (automated)	U/L	177 - 1402	512	422	167	1513	174	45	Plasma
Global sp RI	Sorbitol Dehydrogenase (automated)	U/L	0.4 - 9.1	3.9	4.0	0.0	10.6	254	37	Serum
Global sp RI	Sorbitol Dehydrogenase (automated)	U/L	0.4 - 10.0	4.1	4.0	0.0	12.5	262	39	Serum or plasma
Global sp RI	Glutamate Dehydrogenase (automated)	U/L	0.0 - 6.7	2.1	2.0	0.0	9.0	376	58	Serum
Global sp RI	Glutamate Dehydrogenase (automated)	U/L	0.0 - 6.6	2.1	2.0	0.0	9.0	385	58	Serum or plasma
Global sp RI	Alkaline Phosphatase (automated)	U/L	9 - 279	109	90	6	338	65	23	Whole Blood
Global sp RI	Alkaline Phosphatase (automated)	U/L	39 - 311	125	107	1	365	378	102	Plasma
Global sp RI	Alkaline Phosphatase (automated)	U/L	39 - 301	116	92	0	402	6595	291	Serum
Global sp RI	Gamma Glutamyltransferase (colorimetry.automated)	U/L	1 - 15	6	5	0	19	228	75	Plasma
Global sp RI	Gamma Glutamyltransferase (colorimetry.automated)	U/L	0 - 15	5	4	0	22	4999	253	Serum
Global sp RI	Amylase (automated)	U/L	0 - 11871	4032	3598	0	17446	1436	173	Serum
Global sp RI	Amylase (automated)	U/L	0 - 5374	1396	1050	0	6626	94	33	Plasma
Global sp RI	Lipase (automated)	U/L	1 - 41	13	9	0	58	837	107	Serum
Global sp RI	Lipase (automated)	U/L	0 - 28	10	10	0	29	72	23	Plasma
Global sp RI	Creatine Kinase (automated)	U/L	35 - 1494	449	342	28	1562	54	18	Whole Blood
Global sp RI	Creatine Kinase (automated)	U/L	54 - 469	165	134	1	568	4866	273	Serum
Global sp RI	Creatine Kinase (automated)	U/L	71 - 887	265	196	17	1021	298	92	Plasma
Global sp RI	Total Bilirubin (automated)	µmol/L	1.0 - 10.3	4.1	3.4	0.0	13.7	275	96	Plasma
Global sp RI	Total Bilirubin (automated)	µmol/L	1.0 - 8.6	3.6	3.4	0.0	13.9	6329	289	Serum
Global sp RI	Total Bilirubin (automated)	µmol/L	1.7 - 6.8	3.7	3.4	1.7	6.8	43	21	Whole Blood
Global sp RI	Direct Bilirubin (automated)	µmol/L	1.7 - 1.7	1.7	1.7	1.7	1.7	878	86	Serum
Global sp RI	Direct Bilirubin (automated)	µmol/L	0.0 - 13.6	3.6	1.7	0.0	13.7	40	15	Plasma
Global sp RI	Indirect Bilirubin (reported)	µmol/L	1.7 - 1.7	1.7	1.7	1.7	1.7	556	69	Serum or plasma
Basic Stats	Indirect Bilirubin (reported)	µmol/L	N/A - N/A	1.7	1.7	1.7	1.7	15	12	Plasma
Global sp RI	Indirect Bilirubin (reported)	µmol/L	1.7 - 1.7	1.7	1.7	1.2	2.2	564	72	Serum
Global sp RI	Indirect Bilirubin (calculated)	µmol/L	-0.11 - 3.42	2.08	1.71	-0.20	3.42	58	15	Serum
Global sp RI	Indirect Bilirubin (calculated)	µmol/L	-0.10 - 3.42	2.07	1.71	-0.20	3.42	60	15	Serum or plasma
Global sp RI	Total Bile Acids (random.colorimetry)	µmol/L	0.5 - 25.6	6.6	5.0	0.4	26.5	74	35	Serum or plasma
Global sp RI	Total Bile Acids (random.colorimetry)	µmol/L	0.5 - 25.8	6.8	5.1	0.4	26.5	69	33	Serum
Global sp RI	Total Protein (colorimetry.automated)	g/L	64 - 95	79	79	46	112	7217	298	Serum
Global sp RI	Total Protein (colorimetry.automated)	g/L	65 - 97	82	82	44	104	433	108	Plasma
Global sp RI	Total Protein (refractometer.manual)	g/L	63 - 93	79	80	50	106	671	86	Serum
Global sp RI	Total Protein (refractometer.manual)	g/L	62 - 90	74	74	50	102	4574	74	Plasma
Global sp RI	Albumin (bromocresol green.automated)	g/L	27 - 50	34	34	25	55	424	60	Serum
Global sp RI	Albumin (bromocresol green.automated)	g/L	22 - 47	38	40	21	50	87	18	Plasma
Global sp RI	Albumin (immunoassay)	g/L	23 - 45	33	33	15	54	931	109	Serum
Global sp RI	Albumin (immunoassay)	g/L	32 - 49	42	42	31	50	59	7	Plasma
Global sp RI	Globulin (reported)	g/L	32 - 68	50	51	19	77	235	83	Plasma
Global sp RI	Globulin (reported)	g/L	33 - 64	47	47	13	82	6138	262	Serum
Global sp RI	Globulin (calculated)	g/L	27 - 68	47	47	25	76	92	18	Serum or plasma

Global sp RI	Globulin (calculated)	g/L	27 - 68	46	46	25	76	85	14	Serum
Global sp RI	Albumin:Globulin ratio (reported)	ratio	0.1 - 0.8	0.6	0.6	0.1	0.8	124	36	Plasma
Global sp RI	Albumin:Globulin ratio (reported)	ratio	0.1 - 1.1	0.7	0.7	0.0	1.4	4143	166	Serum
Global sp RI	Albumin:Globulin ratio (calculated)	ratio	0.5 - 1.0	0.7	0.7	0.3	1.1	426	38	Serum
Global sp RI	Albumin:Globulin ratio (calculated)	ratio	0.5 - 1.0	0.7	0.7	0.3	1.1	427	38	Serum or plasma
Global sp RI	Fibrinogen (turbidimetry.automated)	g/L	2.00 - 8.00	3.84	4.00	0.00	9.30	1280	75	Plasma
Global sp RI	Fibrinogen (turbidimetry.automated)	g/L	2.00 - 8.00	3.84	4.00	0.00	9.30	1280	75	Serum or plasma
Basic Stats	Fibrinogen (ELISA)	g/L	N/A - N/A	3.33	3.06	1.80	8.00	20	12	Serum or plasma
Basic Stats	Fibrinogen (ELISA)	g/L	N/A - N/A	3.33	3.06	1.80	8.00	20	12	Plasma
Basic Stats	Fibrinogen (heat precipitation.manual)	g/L	N/A - N/A	5.52	6.05	2.00	8.50	24	3	Serum or plasma
Basic Stats	Fibrinogen (heat precipitation.manual)	g/L	N/A - N/A	5.52	6.05	2.00	8.50	24	3	Plasma
Basic Stats	Fibrinogen (mechanical coagulation.automated)	g/L	N/A - N/A	2.59	2.59	0.98	5.66	33	8	Serum or plasma
Basic Stats	Fibrinogen (mechanical coagulation.automated)	g/L	N/A - N/A	2.59	2.59	0.98	5.66	33	8	Plasma
Basic Stats	C-reactive Protein (automated.immunoturbidity)	mg/L	N/A - N/A	4	3	0	10	19	8	Serum
Basic Stats	C-reactive Protein (automated.immunoturbidity)	mg/L	N/A - N/A	4	3	0	10	19	8	Serum or plasma
Global sp RI	Serum Amyloid A (immunoturbidity)	mg/L	0.1 - 230.2	36.9	5.1	0.0	251.9	245	50	Serum or plasma
Global sp RI	Serum Amyloid A (immunoturbidity)	mg/L	0.2 - 174.8	26.4	4.3	0.1	188.4	217	48	Serum
Basic Stats	Serum Amyloid A (immunoturbidity)	mg/L	N/A - N/A	63.3	43.2	0.0	208.2	19	8	Plasma
Global sp RI	Haptoglobin (colorimetry.automated)	g/L	0.11 - 3.95	1.32	1.17	0.04	5.45	396	41	Serum or plasma
Global sp RI	Haptoglobin (colorimetry.automated)	g/L	0.12 - 3.98	1.33	1.19	0.04	5.45	376	39	Serum
Basic Stats	Haptoglobin (colorimetry.automated)	g/L	N/A - N/A	1.18	1.10	0.07	2.48	20	7	Plasma
Global sp RI	Iron (automated)	µmol/L	2.1 - 22.2	10.8	10.6	0.0	28.8	1271	109	Serum or plasma
Global sp RI	Iron (automated)	µmol/L	2.1 - 22.2	10.8	10.6	0.0	28.8	1261	108	Serum
Global sp RI	Iron (fluid.inductively coupled plasma mass spectrometry)	µmol/L	0.0 - 17.3	10.4	10.7	0.0	18.1	60	25	Serum or plasma
Global sp RI	Iron (fluid.inductively coupled plasma mass spectrometry)	µmol/L	0.0 - 17.5	10.3	10.7	0.0	18.1	56	25	Serum
Global sp RI	Total Iron-Binding Capacity (automated)	µmol/L	33.7 - 52.1	40.9	40.5	30.4	61.6	214	18	Serum
Global sp RI	Total Iron-Binding Capacity (automated)	µmol/L	33.7 - 52.4	40.9	40.7	30.4	61.6	220	20	Serum or plasma
Global sp RI	Iron Saturation (reported)	%	14 - 60	32	31	7	69	224	17	Serum or plasma
Global sp RI	Iron Saturation (reported)	%	14 - 59	32	31	7	69	220	17	Serum
Basic Stats	Prothrombin Time (automated)	sec.	N/A - N/A	12	11	10	21	18	14	Serum or plasma
Basic Stats	Prothrombin Time (automated)	sec.	N/A - N/A	12	11	10	21	18	14	Plasma
Global sp RI	Specific Gravity (fluid.random.refractometer.manual)	ratio	1.002 - 1.031	1.014	1.014	1.000	1.043	442	58	Urine
Basic Stats	Lactate (automated)	mmol/L	N/A - N/A	1.7	1.6	1.0	3.5	28	16	Whole Blood
Global sp RI	Osmolality (reported)	mOsmol/kg	249 - 276	262	262	232	286	836	31	Serum
Global sp RI	Osmolality (reported)	mOsmol/kg	249 - 276	262	262	232	286	836	31	Serum or plasma
Global sp RI	Osmolality (freezing point depression.automated)	mOsmol/kg	247 - 278	260	259	239	290	519	66	Serum
Global sp RI	Osmolality (freezing point depression.automated)	mOsmol/kg	247 - 278	260	259	239	290	524	68	Serum or plasma
Global sp RI	Osmolarity (reported)	mOsmol/L	247 - 277	264	265	239	283	456	46	Serum or plasma
Global sp RI	Osmolarity (reported)	mOsmol/L	247 - 277	264	265	239	283	452	45	Serum
Global sp RI	Pre-Albumin (electrophoresis)	g/L	0.0 - 4.3	1.6	1.7	0.0	5.5	360	36	Serum or plasma
Global sp RI	Pre-Albumin (electrophoresis)	g/L	0.0 - 4.4	1.7	1.8	0.0	5.5	335	33	Serum
Basic Stats	Pre-Albumin (electrophoresis)	g/L	N/A - N/A	0.0	0.0	0.0	0.3	23	8	Plasma
Global sp RI	Albumin (electrophoresis)	g/L	21.7 - 46.8	38.0	40.0	20.5	50.0	87	18	Plasma

Global sp RI	Albumin (electrophoresis)	g/L	21.8 - 44.4	32.0	31.6	15.2	49.0	489	65	Serum
Basic Stats	Alpha-1 Globulin (electrophoresis)	g/L	N/A - N/A	7.4	7.5	5.5	9.2	26	10	Plasma
Global sp RI	Alpha-1 Globulin (electrophoresis)	g/L	0.5 - 10.0	4.6	5.8	0.0	12.2	518	66	Serum or plasma
Global sp RI	Alpha-1 Globulin (electrophoresis)	g/L	0.5 - 10.1	4.5	5.5	0.0	12.2	491	63	Serum
Global sp RI	Alpha-2 Globulin (electrophoresis)	g/L	3.2 - 12.9	7.8	7.5	0.3	24.0	519	64	Serum or plasma
Global sp RI	Alpha-2 Globulin (electrophoresis)	g/L	3.2 - 12.9	7.9	8.0	0.3	24.0	492	61	Serum
Basic Stats	Alpha-2 Globulin (electrophoresis)	g/L	N/A - N/A	5.0	4.8	2.5	10.0	25	9	Plasma
Global sp RI	Beta-1 Globulin (electrophoresis)	g/L	0.8 - 29.2	10.8	9.0	0.0	38.5	218	52	Serum or plasma
Global sp RI	Beta-1 Globulin (electrophoresis)	g/L	0.8 - 29.4	10.7	8.8	0.0	38.5	211	48	Serum
Global sp RI	Beta-2 Globulin (electrophoresis)	g/L	1.0 - 18.0	9.6	9.4	0.7	19.0	126	37	Serum or plasma
Global sp RI	Beta-2 Globulin (electrophoresis)	g/L	1.0 - 18.0	9.6	9.4	0.7	19.0	124	36	Serum
Global sp RI	Combined Beta Globulin (electrophoresis)	g/L	6.0 - 26.3	16.5	16.4	1.7	36.7	272	43	Serum
Global sp RI	Combined Beta Globulin (electrophoresis)	g/L	6.0 - 26.2	16.3	16.2	1.7	33.5	293	45	Serum or plasma
Basic Stats	Combined Beta Globulin (electrophoresis)	g/L	N/A - N/A	14.9	15.1	10.6	17.6	22	6	Plasma
Basic Stats	Gamma Globulin (electrophoresis)	g/L	N/A - N/A	18.2	18.1	11.0	24.7	26	9	Plasma
Global sp RI	Gamma Globulin (electrophoresis)	g/L	6.3 - 26.0	15.7	14.9	0.0	35.0	473	65	Serum or plasma
Global sp RI	Gamma Globulin (electrophoresis)	g/L	6.4 - 26.0	15.6	14.7	0.0	35.0	446	62	Serum
Global sp RI	Total Globulin (electrophoresis)	g/L	33.0 - 64.0	47.1	47.0	13.0	82.0	6150	262	Serum
Global sp RI	Total Globulin (electrophoresis)	g/L	33.0 - 64.0	47.3	47.0	13.0	82.0	6387	278	Serum or plasma
Basic Stats	Oxygen Partial Pressure (arterial.blood gas measurement.automated)	kPa	N/A - N/A	10.58	9.00	0.24	23.46	16	9	Whole Blood
Basic Stats	Oxygen Partial Pressure (venous.blood gas measurement.automated)	kPa	N/A - N/A	13.62	8.07	3.47	32.40	34	14	Whole Blood
Basic Stats	Oxygen Saturation (blood gas measurement.reported)	%	N/A - N/A	94	99	53	100	28	14	Whole Blood
Global sp RI	Partial Pressure Carbon Dioxide (blood gas measurement)	kPa	2.84 - 8.29	5.95	6.06	1.99	8.31	58	29	Whole Blood
Global sp RI	Bicarbonate (blood gas measurement.reported)	mmol/L	20.7 - 32.2	27.6	27.9	20.4	32.3	46	19	Whole Blood
Basic Stats	pH (arterial.blood gas measurement.37C.automated)	pH	N/A - N/A	7.4	7.4	7.3	7.5	28	18	Whole Blood
Basic Stats	pH (venous.blood gas measurement.37C.automated)	pH	N/A - N/A	7.4	7.4	7.3	7.5	27	11	Whole Blood
Basic Stats	Base Excess (arterial.blood gas measurement.reported)	mmol/L	N/A - N/A	2.3	3.0	-4.0	6.0	22	12	Whole Blood
Basic Stats	Base Excess (venous.blood gas measurement.reported)	mmol/L	N/A - N/A	3.2	2.7	0.2	8.0	29	11	Whole Blood
Global sp RI	Cholesterol (automated)	mmol/L	0.39 - 1.73	1.08	1.09	0.00	2.33	4125	251	Serum
Global sp RI	Cholesterol (automated)	mmol/L	0.67 - 2.25	1.18	1.14	0.00	2.36	186	55	Plasma
Basic Stats	High Density Lipoprotein Cholesterol (automated)	mmol/L	N/A - N/A	0.34	0.29	0.23	0.73	17	4	Serum
Basic Stats	High Density Lipoprotein Cholesterol (automated)	mmol/L	N/A - N/A	0.34	0.29	0.23	0.73	17	4	Serum or plasma
Basic Stats	Low Density Lipoprotein Cholesterol (indirect.automated)	mmol/L	N/A - N/A	0.71	0.73	0.31	0.98	18	5	Serum
Basic Stats	Low Density Lipoprotein Cholesterol (indirect.automated)	mmol/L	N/A - N/A	0.71	0.73	0.31	0.98	18	5	Serum or plasma
Global sp RI	Triglyceride (automated)	mmol/L	0.14 - 1.46	0.54	0.45	0.00	1.89	1441	177	Serum
Global sp RI	Triglyceride (automated)	mmol/L	0.04 - 0.68	0.24	0.21	0.00	0.68	59	12	Plasma
Global sp RI	Specific Gravity (urine.random.automated)	ratio	1.003 - 1.030	1.018	1.019	1.000	1.035	174	47	Urine
Global sp RI	Specific Gravity (urine.random.reagent strip.visual)	ratio	1.000 - 1.048	1.013	1.010	1.000	1.050	43	12	Urine
Global sp RI	pH (urine.random.reagent strip.visual)	pH	6.0 - 9.0	7.9	8.0	5.0	9.0	646	100	Urine
Global sp RI	Protein (urine.random.automated)	g/L	0.00 - 0.90	0.18	0.09	0.00	0.93	74	31	Urine
Global sp RI	Creatinine (urine.random.automated)	mmol/L	0.002 - 13.459	2.815	1.464	0.002	14.144	70	23	Urine
Global sp RI	Protein:Creatinine ratio (urine.random.reported)	ratio	0.08 - 4.53	0.93	0.44	0.08	4.53	41	16	Urine
Basic Stats	Retinol (liquid chromatography)	µmol/L	N/A - N/A	0.19	0.19	0.00	0.60	22	16	Serum or plasma
Basic Stats	Retinol (liquid chromatography)	µmol/L	N/A - N/A	0.64	0.19	0.00	2.41	22	15	Serum
Basic Stats	25-hydroxycholecalciferol (fluid.chemiluminescence immunoassay)	nmol/L	N/A - N/A	28	27	11	39	19	6	Serum or plasma

Basic Stats	25-hydroxycholecalciferol (fluid.chemiluminescence immunoassay)	nmol/L	N/A - N/A	28	27	11	39	19	6	Serum
Global sp RI	25-hydroxycholecalciferol (fluid.radioimmunoassay)	nmol/L	13 - 101	52	55	9	110	78	25	Serum or plasma
Global sp RI	25-hydroxycholecalciferol (fluid.radioimmunoassay)	nmol/L	13 - 101	52	55	9	110	78	25	Serum
Global sp RI	Alpha-Tocopherol (fluid.high precision liquid chromatography)	µmol/L	0.277 - 6.400	1.966	1.510	0.000	8.127	278	72	Serum
Global sp RI	Alpha-Tocopherol (fluid.high precision liquid chromatography)	µmol/L	0.284 - 6.303	1.974	1.533	0.000	8.127	289	77	Serum or plasma
Global sp RI	Alpha-Tocopherol (fluid.ultra precision liquid chromatography)	µmol/L	0.28 - 8.92	3.01	1.99	0.14	12.07	213	64	Serum
Global sp RI	Alpha-Tocopherol (fluid.ultra precision liquid chromatography)	µmol/L	0.58 - 3.67	2.41	2.60	0.53	3.70	46	10	Plasma
Basic Stats	Selenium (fluid.graphite furnace atomic absorption spectrometry)	µmol/L	N/A - N/A	1.88	1.88	1.50	2.39	20	9	Serum
Basic Stats	Selenium (fluid.graphite furnace atomic absorption spectrometry)	µmol/L	N/A - N/A	1.88	1.88	1.50	2.39	20	9	Serum or plasma

ENDOCRINOLOGY / REPRODUCTION										
Expected Result Type	Test	Units	Reference Interval	Mean	Median	Lowest Data Value	Highest Data Value	Sample Size	Animals	Sample Type
Basic Stats	Total Triiodothyronine (radioimmunoassay)	nmol/L	N/A - N/A	0.18	0.18	0.00	0.30	17	5	Serum or plasma
Basic Stats	Total Triiodothyronine (radioimmunoassay)	nmol/L	N/A - N/A	0.18	0.18	0.00	0.30	17	5	Serum
Basic Stats	Total Thyroxine (automated)	nmol/L	N/A - N/A	116.8	119.7	0.1	189.2	33	15	Serum or plasma
Basic Stats	Total Thyroxine (automated)	nmol/L	N/A - N/A	116.7	119.7	0.1	189.2	32	14	Serum
Global sp RI	Total Thyroxine (radioimmunoassay)	nmol/L	0 - 199	38	0	0	206	56	22	Serum or plasma
Global sp RI	Total Thyroxine (radioimmunoassay)	nmol/L	0 - 199	38	0	0	206	56	22	Serum
Global sp RI	Total Estradiol (automated)	pmol/L	16 - 151	65	59	10	191	136	2	Serum or plasma
Global sp RI	Total Estradiol (automated)	pmol/L	16 - 151	65	59	10	191	136	2	Serum