

Asian elephant reference values toxicology (International Units)

Rotterdam Zoo - 23/03/2023



Global information serving conservation.

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Taxonomy : Elephas maximus / Asian elephant

Sex Type : All Sex types

Age Grouping : All Ages

Restraint Type : All Restraint types

TOXICOLOGY

Expected Result Type	Test	Units	Reference Interval	Mean	Median	Lowest Data Value	Highest Data Value	Sample Size	Animals	Sample Type
Basic Stats	Copper (fluid.inductively coupled plasma - atomic emission spectrometry)	µmol/L	N/A - N/A	15.6	15.5	10.0	18.9	16	10	Serum
Basic Stats	Copper (fluid.inductively coupled plasma - atomic emission spectrometry)	µmol/L	N/A - N/A	15.6	15.5	10.0	18.9	16	10	Serum or plasma
Global sp RI	Manganese (fluid.inductively coupled plasma mass spectrometry)	nmol/L	9.1 - 63.7	25.7	21.8	9.1	91.0	119	48	Serum or plasma
Global sp RI	Manganese (fluid.inductively coupled plasma mass spectrometry)	nmol/L	9.1 - 64.0	25.8	21.8	9.1	91.0	117	48	Serum
Global sp RI	Cobalt (fluid.inductively coupled plasma mass spectrometry)	nmol/L	3.7 - 39.3	12.9	10.0	2.5	49.7	177	55	Serum
Global sp RI	Cobalt (fluid.inductively coupled plasma mass spectrometry)	nmol/L	3.7 - 39.3	12.9	10.0	2.5	49.7	177	55	Serum or plasma
Basic Stats	Copper (fluid.flame atomic absorption spectrometry)	µmol/L	N/A - N/A	15.001	15.028	13.376	17.310	16	10	Serum or plasma
Global sp RI	Molybdenum (fluid.inductively coupled plasma mass spectrometry)	nmol/L	16.3 - 373.3	102.5	69.8	8.3	455.5	185	58	Serum
Global sp RI	Molybdenum (fluid.inductively coupled plasma mass spectrometry)	nmol/L	16.5 - 371.9	103.0	70.9	8.3	455.5	191	58	Serum or plasma
Global sp RI	Copper (fluid.inductively coupled plasma mass spectrometry)	µmol/L	10.811 - 19.270	14.837	14.792	8.183	21.402	193	63	Serum or plasma
Global sp RI	Copper (fluid.inductively coupled plasma mass spectrometry)	µmol/L	10.811 - 19.270	14.837	14.792	8.183	21.402	193	63	Serum
Global sp RI	Zinc (fluid.inductively coupled plasma mass spectrometry)	µmol/L	11.2 - 23.7	15.9	15.3	10.5	26.1	151	60	Serum or plasma
Global sp RI	Zinc (fluid.inductively coupled plasma mass spectrometry)	µmol/L	11.2 - 23.7	15.9	15.3	10.5	26.1	151	60	Serum
Basic Stats	Zinc (fluid.inductively coupled plasma - atomic emission spectrometry)	µmol/L	N/A - N/A	16.5	15.3	12.6	22.9	15	10	Serum or plasma
Basic Stats	Zinc (fluid.inductively coupled plasma - atomic emission spectrometry)	µmol/L	N/A - N/A	16.5	15.3	12.6	22.9	15	10	Serum
Global sp RI	Selenium (fluid.inductively coupled plasma mass spectrometry)	µmol/L	0.86 - 1.72	1.38	1.39	0.57	1.92	271	65	Serum or plasma
Global sp RI	Selenium (fluid.inductively coupled plasma mass spectrometry)	µmol/L	0.86 - 1.72	1.38	1.39	0.57	1.92	265	65	Serum

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Taxonomy : Elephas maximus / Asian elephant

Sex Type : All Sex types

Age Grouping : All Ages

Restraint Type : All Restraint types

TOXICOLOGY

Expected Result Type	Test	Units	Reference Interval	Mean	Median	Lowest Data Value	Highest Data Value	Sample Size	Animals	Sample Type
Global sp RI	Manganese (fluid.inductively coupled plasma mass spectrometry)	ng/mL	0.57 - 9.33	2.37	1.55	0.50	9.40	68	29	Serum or plasma
Global sp RI	Cobalt (fluid.inductively coupled plasma mass spectrometry)	ng/mL	0.11 - 1.26	0.54	0.48	0.07	1.71	115	31	Serum
Global sp RI	Manganese (fluid.inductively coupled plasma mass spectrometry)	ng/mL	0.57 - 9.33	2.37	1.55	0.50	9.40	68	29	Serum
Global sp RI	Cobalt (fluid.inductively coupled plasma mass spectrometry)	ng/mL	0.11 - 1.26	0.54	0.48	0.07	1.71	115	31	Serum or plasma
Basic Stats	Copper (fluid.flame atomic absorption spectrometry)	µg/dL	N/A - N/A	79.46	91.00	0.74	133.45	21	13	Serum or plasma
Global sp RI	Molybdenum (fluid.inductively coupled plasma mass spectrometry)	ng/mL	1.50 - 107.00	29.24	16.50	0.80	139.40	119	30	Serum or plasma
Basic Stats	Copper (fluid.flame atomic absorption spectrometry)	µg/dL	N/A - N/A	79.46	91.00	0.74	133.45	21	13	Serum
Global sp RI	Molybdenum (fluid.inductively coupled plasma mass spectrometry)	ng/mL	1.50 - 107.00	29.24	16.50	0.80	139.40	119	30	Serum
Global sp RI	Copper (fluid.inductively coupled plasma mass spectrometry)	µg/dL	67.45 - 120.00	93.45	93.00	49.57	125.00	165	46	Serum or plasma
Global sp RI	Copper (fluid.inductively coupled plasma mass spectrometry)	µg/dL	67.39 - 120.00	93.15	93.00	49.57	125.00	161	45	Serum
Global sp RI	Zinc (fluid.inductively coupled plasma mass spectrometry)	µg/ml	0.27 - 0.77	0.55	0.55	0.10	0.98	110	33	Serum or plasma
Global sp RI	Zinc (fluid.inductively coupled plasma mass spectrometry)	µg/ml	0.32 - 0.72	0.55	0.55	0.22	0.98	104	31	Serum
Basic Stats	Selenium (fluid.inductively coupled plasma mass spectrometry)	ng/mL	N/A - N/A	303	353	37	598	34	16	Whole Blood
Global sp RI	Selenium (fluid.inductively coupled plasma mass spectrometry)	ng/mL	86 - 177	138	140	69	196	177	57	Serum or plasma
Global sp RI	Selenium (fluid.inductively coupled plasma mass spectrometry)	ng/mL	86 - 177	139	140	69	196	176	56	Serum

African elephant reference values toxicology (International Units)

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Taxonomy : *Loxodonta africana* / African elephant

Sex Type : All Sex types

Age Grouping : All Ages

Restraint Type : All Restraint types

TOXICOLOGY

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Basic Stats	Copper (fluid.inductively coupled plasma - atomic emission spectrometry)	µmol/L	N/A - N/A	15.6	15.5	10.0	18.9	16	10	Serum
Basic Stats	Copper (fluid.inductively coupled plasma - atomic emission spectrometry)	µmol/L	N/A - N/A	15.6	15.5	10.0	18.9	16	10	Serum or plasma
Global sp RI	Manganese (fluid.inductively coupled plasma mass spectrometry)	nmol/L	9.1 - 63.7	25.7	21.8	9.1	91.0	119	48	Serum or plasma
Global sp RI	Manganese (fluid.inductively coupled plasma mass spectrometry)	nmol/L	9.1 - 64.0	25.8	21.8	9.1	91.0	117	48	Serum
Global sp RI	Cobalt (fluid.inductively coupled plasma mass spectrometry)	nmol/L	3.7 - 39.3	12.9	10.0	2.5	49.7	177	55	Serum
Global sp RI	Cobalt (fluid.inductively coupled plasma mass spectrometry)	nmol/L	3.7 - 39.3	12.9	10.0	2.5	49.7	177	55	Serum or plasma
Basic Stats	Copper (fluid.flame atomic absorption spectrometry)	µmol/L	N/A - N/A	15.001	15.028	13.376	17.310	16	10	Serum or plasma
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Global sp RI	Molybdenum (fluid.inductively coupled plasma mass spectrometry)	nmol/L	16.5 - 371.9	103.0	70.9	8.3	455.5	191	58	Serum or plasma
Global sp RI	Copper (fluid.inductively coupled plasma mass spectrometry)	µmol/L	10.811 - 19.270	14.837	14.792	8.183	21.402	193	63	Serum or plasma
Global sp RI	Copper (fluid.inductively coupled plasma mass spectrometry)	µmol/L	10.811 - 19.270	14.837	14.792	8.183	21.402	193	63	Serum
Global sp RI	Zinc (fluid.inductively coupled plasma mass spectrometry)	µmol/L	11.2 - 23.7	15.9	15.3	10.5	26.1	151	60	Serum or plasma
Global sp RI	Zinc (fluid.inductively coupled plasma mass spectrometry)	µmol/L	11.2 - 23.7	15.9	15.3	10.5	26.1	151	60	Serum
Basic Stats	Zinc (fluid.inductively coupled plasma - atomic emission spectrometry)	µmol/L	N/A - N/A	16.5	15.3	12.6	22.9	15	10	Serum or plasma
Basic Stats	Zinc (fluid.inductively coupled plasma - atomic emission spectrometry)	µmol/L	N/A - N/A	16.5	15.3	12.6	22.9	15	10	Serum
Global sp RI	Selenium (fluid.inductively coupled plasma mass spectrometry)	µmol/L	0.86 - 1.72	1.38	1.39	0.57	1.92	271	65	Serum or plasma
Global sp RI	Selenium (fluid.inductively coupled plasma mass spectrometry)	µmol/L	0.86 - 1.72	1.38	1.39	0.57	1.92	265	65	Serum

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Expected Result Type	Test	Units	Reference Interval	Mean	Median	Lowest Data Value	Highest Data Value	Sample Size	Animals	Sample Type
Basic Stats	Copper (fluid.inductively coupled plasma - atomic emission spectrometry)	µg/dL	N/A - N/A	99	99	64	120	16	10	Serum
Basic Stats	Copper (fluid.inductively coupled plasma - atomic emission spectrometry)	µg/dL	N/A - N/A	99	99	64	120	16	10	Serum or plasma
Global sp RI	Cobalt (fluid.inductively coupled plasma mass spectrometry)	ng/mL	0.22 - 2.32	0.76	0.59	0.15	2.93	177	55	Serum
Global sp RI	Manganese (fluid.inductively coupled plasma mass spectrometry)	ng/mL	0.50 - 3.50	1.41	1.20	0.50	5.00	119	48	Serum or plasma
Global sp RI	Manganese (fluid.inductively coupled plasma mass spectrometry)	ng/mL	0.50 - 3.52	1.42	1.20	0.50	5.00	117	48	Serum
Global sp RI	Cobalt (fluid.inductively coupled plasma mass spectrometry)	ng/mL	0.22 - 2.32	0.76	0.59	0.15	2.93	177	55	Serum or plasma
Basic Stats	Copper (fluid.flame atomic absorption spectrometry)	µg/dL	N/A - N/A	95.32	95.50	85.00	110.00	16	10	Serum or plasma
Global sp RI	Molybdenum (fluid.inductively coupled plasma mass spectrometry)	ng/mL	1.58 - 35.68	9.88	6.80	0.80	43.70	191	58	Serum or plasma
Global sp RI	Molybdenum (fluid.inductively coupled plasma mass spectrometry)	ng/mL	1.56 - 35.81	9.83	6.70	0.80	43.70	185	58	Serum
Global sp RI	Copper (fluid.inductively coupled plasma mass spectrometry)	µg/dL	68.70 - 122.45	94.28	94.00	52.00	136.00	193	63	Serum
Global sp RI	Copper (fluid.inductively coupled plasma mass spectrometry)	µg/dL	68.70 - 122.45	94.28	94.00	52.00	136.00	193	63	Serum or plasma
Global sp RI	Zinc (fluid.inductively coupled plasma mass spectrometry)	µg/ml	0.73 - 1.55	1.04	1.00	0.69	1.71	151	60	Serum or plasma
Global sp RI	Zinc (fluid.inductively coupled plasma mass spectrometry)	µg/ml	0.73 - 1.55	1.04	1.00	0.69	1.71	151	60	Serum
Basic Stats	Zinc (fluid.inductively coupled plasma - atomic emission spectrometry)	µg/ml	N/A - N/A	1.08	1.00	0.82	1.50	15	10	Serum
Basic Stats	Zinc (fluid.inductively coupled plasma - atomic emission spectrometry)	µg/ml	N/A - N/A	1.08	1.00	0.82	1.50	15	10	Serum or plasma
Global sp RI	Selenium (fluid.inductively coupled plasma mass spectrometry)	ng/mL	68 - 136	109	110	45	152	271	65	Serum or plasma
Global sp RI	Selenium (fluid.inductively coupled plasma mass spectrometry)	ng/mL	68 - 136	109	110	45	152	265	65	Serum