

TriCore Test Code	Test Name	Age	Sex	New Reference Interval	Units of Measure
ADCTH	Adrenocorticotrophic Hormone	18+ years	All	7-63	pg/mL
AGAP	Anion Gap	All	All	<18	mmol/L
AFPT	Alpha Fetoprotein	All	All	<8.4	ng/mL
ALB	Albumin	All	All	3.3-5.2	g/dL
ALKP	Alkaline Phosphatase	0-14 days	All	83-248	U/L
ALKP	Alkaline Phosphatase	15 days to 11 months	All	122-469	U/L
ALKP	Alkaline Phosphatase	1-9 years	All	142-335	U/L
ALKP	Alkaline Phosphatase	10-12 years	All	129-417	U/L
ALKP	Alkaline Phosphatase	13-14 years	M	116-468	U/L
ALKP	Alkaline Phosphatase	13-14 years	F	57-254	U/L
ALKP	Alkaline Phosphatase	15-16 years	M	82-331	U/L
ALKP	Alkaline Phosphatase	15-16 years	F	50-117	U/L
ALKP	Alkaline Phosphatase	17-18 years	M	55-149	U/L
ALKP	Alkaline Phosphatase	17-18 years	F	45-87	U/L
ALKP	Alkaline Phosphatase	19+ years	M	40-129	U/L
ALKP	Alkaline Phosphatase	19+ years	F	40-129	U/L
ALT	Alanine Aminotransferase	All	M	10-55	U/L
ALT	Alanine Aminotransferase	All	F	10-40	U/L
AMY	Amylase	All	All	28-100	U/L
ASO	Anti-Streptolysin O	0-17 years	All	<150	IU/mL
ASO	Anti-Streptolysin O	18+ years	All	<200	IU/mL
AST	Aspartate Aminotransferase	All	M	10-50	U/L
AST	Aspartate Aminotransferase	All	F	10-40	U/L
B2MGB	Beta-2 Microglobulin	0-59 years	All	0.8-2.4	mg/L
B2MGB	Beta-2 Microglobulin	60+ years	All	0.0-3.0	mg/L
BUN	Blood Urea Nitrogen	All	All	7-25	mg/dL
C125	Cancer Antigen 125	All	F	<39	U/mL
C125	Cancer Antigen 125	All	M	Not established	U/mL
C3	Complement C3	All	All	90-180	mg/dL
C4	Complement C4	All	All	10-40	mg/dL
CA	Calcium	0-9 days	All	7.6-10.4	mg/dL
CA	Calcium	10 days-1 year	All	9.0-11.0	mg/dL
CA	Calcium	2-11 years	All	8.8-10.8	mg/dL
CA	Calcium	12-17 years	All	8.4-10.2	mg/dL
CA	Calcium	18-59 years	All	8.6-10.0	mg/dL
CA	Calcium	60-90 years	All	8.6-10.2	mg/dL
CA	Calcium	91+ years	All	8.2-9.6	mg/dL
CA153	Cancer Antigen 15-3	All	All	<32	U/mL
CEA	Carcinoembryonic Antigen	All	All	<3.9	ng/mL
CERU	Ceruloplasmin	All	M	15-30	mg/dL
CERU	Ceruloplasmin	All	F	16-45	mg/dL
CK	Creatine Kinase	All	M	39-308	U/L
CK	Creatine Kinase	All	F	26-192	U/L
CKMB	Creatine Kinase MB Isoenzyme	All	M	<7.7	ng/mL
CKMB	Creatine Kinase MB Isoenzyme	All	F	<4.3	ng/mL
CL	Chloride	All	All	98-107	mmol/L
CO2	Carbon Dioxide	All	All	19-29	mmol/L
CORT	Cortisol	All	All	Morning (6am-10am): 6.0-18.4 Afternoon (4pm-10pm): 2.7-10.5	ug/dL
CPEPT	C-Peptide	All	All	1.1-4.4	ng/mL
CREA	Creatinine	0 days-1 month	All	0.24-0.85	mg/dL
CREA	Creatinine	2-11 months	All	0.17-0.42	mg/dL
CREA	Creatinine	1-2 years	All	0.24-0.41	mg/dL
CREA	Creatinine	3-4 years	All	0.31-0.47	mg/dL
CREA	Creatinine	5-6 years	All	0.32-0.59	mg/dL
CREA	Creatinine	7-8 years	All	0.40-0.60	mg/dL
CREA	Creatinine	9-10 years	All	0.39-0.73	mg/dL
CREA	Creatinine	11-12 years	All	0.53-0.79	mg/dL
CREA	Creatinine	13-15 years	All	0.57-0.87	mg/dL
CREA	Creatinine	16+ years	M	0.70-1.35	mg/dL
CREA	Creatinine	16+ years	F	0.50-1.04	mg/dL
CRP	C-Reactive Protein	All	All	<0.5	mg/dL
DBIL	Direct Bilirubin	All	All	0.0-0.3	mg/dL
DHEAS	Dehydroepiandrosterone Sulfate	0-6 days	All	108-607	ug/dL
DHEAS	Dehydroepiandrosterone Sulfate	1-3 weeks	All	32-431	ug/dL
DHEAS	Dehydroepiandrosterone Sulfate	1-11 months	All	3-124	ug/dL
DHEAS	Dehydroepiandrosterone Sulfate	1-4 years	All	1-19	ug/dL

DHEAS	Dehydroepiandrosterone Sulfate	5-9 years	All	3-85	ug/dL
DHEAS	Dehydroepiandrosterone Sulfate	10-14 years	M	24-247	ug/dL
DHEAS	Dehydroepiandrosterone Sulfate	10-14 years	F	34-280	ug/dL
DHEAS	Dehydroepiandrosterone Sulfate	15-19 years	M	70-492	ug/dL
DHEAS	Dehydroepiandrosterone Sulfate	15-19 years	F	65-368	ug/dL
DHEAS	Dehydroepiandrosterone Sulfate	20-24 years	M	211-492	ug/dL
DHEAS	Dehydroepiandrosterone Sulfate	20-24 years	F	148-407	ug/dL
DHEAS	Dehydroepiandrosterone Sulfate	25-34 years	M	160-449	ug/dL
DHEAS	Dehydroepiandrosterone Sulfate	25-34 years	F	99-340	ug/dL
DHEAS	Dehydroepiandrosterone Sulfate	35-44 years	M	89-427	ug/dL
DHEAS	Dehydroepiandrosterone Sulfate	35-44 years	F	61-337	ug/dL
DHEAS	Dehydroepiandrosterone Sulfate	45-54 years	M	44-331	ug/dL
DHEAS	Dehydroepiandrosterone Sulfate	45-54 years	F	35-256	ug/dL
DHEAS	Dehydroepiandrosterone Sulfate	55-64 years	M	52-295	ug/dL
DHEAS	Dehydroepiandrosterone Sulfate	55-64 years	F	19-205	ug/dL
DHEAS	Dehydroepiandrosterone Sulfate	65-74 years	M	34-249	ug/dL
DHEAS	Dehydroepiandrosterone Sulfate	65-74 years	F	9-246	ug/dL
DHEAS	Dehydroepiandrosterone Sulfate	75+ years	M	16-123	ug/dL
DHEAS	Dehydroepiandrosterone Sulfate	75+ years	F	12-154	ug/dL
DIG	Digoxin	All	All	0.6-1.2	ng/mL
FE	Iron	All	M	61-157	ug/dL
FE	Iron	All	F	37-145	ug/dL
FOLS	Folate, Serum	All	All	4.6-34.8	ng/mL
FSH	Follicle Stimulating Hormone	All	M	1.5-12.4	mIU/mL
FSH	Follicle Stimulating Hormone	All	F	Follicular phase: 3.4-12.5 Ovulation: 4.7-21.5 Luteal phase: 1.7-7.7 Postmenopausal: 25.8 – 134.8	mIU/mL
FT3	Triiodothyronine, Free	All	All	2.0-4.4	pg/mL
FT4	Thyroxine, Free	All	All	0.9-1.7	ng/dL
GENTAT	Gentamicin, Trough	All	All	<2.1	ug/mL
HBSABT	Hepatitis B Surface Antibody	All	All	<11.5	mIU/mL
HCGQT	Human Chorionic Gonadotropin	0-45 years	F	<2	mIU/mL
HCGQT	Human Chorionic Gonadotropin	45+ years	F	<8	mIU/mL
HCGQT	Human Chorionic Gonadotropin	All	M	<2	mIU/mL
HGH	Human Growth Hormone	0 days-10 years	M	0.09-6.29	ng/mL
HGH	Human Growth Hormone	0 days-10 years	F	0.12-7.79	ng/mL
HGH	Human Growth Hormone	11-16 years	M	0.08-10.8	ng/mL
HGH	Human Growth Hormone	11-16 years	F	0.12-8.05	ng/mL
HGH	Human Growth Hormone	17+ years	M	0.03-2.47	ng/mL
HGH	Human Growth Hormone	17+ years	F	0.13-9.88	ng/mL
HOMO	Homocysteine	All	All	0.0-15.0	umol/L
HSCRCP	C-Reactive Protein, High Sensitivity	All	All	0.0-3.0	mg/L
IGA	Immunoglobulin A	0 days-11 months	All	0-83	mg/dL
IGA	Immunoglobulin A	1-3 years	All	20-100	mg/dL
IGA	Immunoglobulin A	4-6 years	All	27-195	mg/dL
IGA	Immunoglobulin A	7-9 years	All	34-305	mg/dL
IGA	Immunoglobulin A	10-11 years	All	53-204	mg/dL
IGA	Immunoglobulin A	12-13 years	All	58-358	mg/dL
IGA	Immunoglobulin A	14-15 years	All	47-249	mg/dL
IGA	Immunoglobulin A	16-19 years	All	61-348	mg/dL
IGA	Immunoglobulin A	20+ years	All	70-400	mg/dL
IGFBP3	Insulin-like Growth Factor Binding Protein-3	See Below	See Below	See Below	ng/mL
IGFI	Insulin-like Growth Factor 1	See Below	See Below	See Below	ng/mL
IgG	Immunoglobulin G	0-2 years	All	242-1108	mg/dL
IgG	Immunoglobulin G	3-4 years	All	485-1160	mg/dL
IgG	Immunoglobulin G	5-9 years	All	514-1672	mg/dL
IgG	Immunoglobulin G	10-14 years	All	581-1652	mg/dL
IgG	Immunoglobulin G	15-18 years	All	479-1433	mg/dL
IgG	Immunoglobulin G	19+ years	All	768-1632	mg/dL
IGM	Immunoglobulin M	0-1 years	All	0-145	mg/dL
IGM	Immunoglobulin M	1-3 years	All	19-146	mg/dL
IGM	Immunoglobulin M	4-6 years	All	24-210	mg/dL
IGM	Immunoglobulin M	7-9 years	All	31-208	mg/dL
IGM	Immunoglobulin M	10-11 years	All	31-179	mg/dL
IGM	Immunoglobulin M	12-13 years	All	35-239	mg/dL
IGM	Immunoglobulin M	14-15 years	All	15-188	mg/dL
IGM	Immunoglobulin M	16-19 years	All	23-259	mg/dL

IGM	Immunoglobulin M	20+ years	All	40-230	mg/dL
INSUL	Insulin	All	All	2.6-24.9	uIU/mL
LACT	Lactate	All	All	0.5-2.2	mmol/L
LDH	Lactate Dehydrogenase	0 days-3 weeks	All	225-600	U/L
LDH	Lactate Dehydrogenase	1 month-17 years	All	120-300	U/L
LDH	Lactate Dehydrogenase	18+ years	All	135-225	U/L
LH	Luteinizing Hormone	All	M	1.7-8.6	mIU/mL
LH	Luteinizing Hormone	All	F	Follicular phase: 2.4-12.6 Ovulation: 14.0-95.6 Luteal phase: 1.0-11.4 Postmenopausal: 7.7-58.5	mIU/mL
LIPA	Lipase	All	All	13-60	U/L
MA24	Microalbumin, Urine, 24 Hour	All	All	<29.9	mgALB/24hrs
MG	Magnesium	All	All	1.3-2.7	mg/dL
NA	Sodium	All	All	135-145	mmol/L
NBILD	Direct Bilirubin, Neonate	All	All	0.0-0.3	mg/dL
NBILT	Total Bilirubin, Neonate	0 days	All	0.0-5.1	mg/dL
NBILT	Total Bilirubin, Neonate	1-2 days	All	0.0-7.2	mg/dL
NBILT	Total Bilirubin, Neonate	3-29 days	All	0.0-10.3	mg/dL
NBILT	Total Bilirubin, Neonate	30+ days	All	0.0-1.2	mg/dL
NH3	Ammonia	All	M	16-60	umol/L
NH3	Ammonia	All	F	11-51	umol/L
PRLA	Prolactin	All	M	4.0-15.2	ng/mL
PRLA	Prolactin	All	F	4.8-23.3	ng/mL
PROBNP	Pro-Brain Natriuretic Peptide, N-Terminal	0 days-74 years	All	0-125	pg/mL
PROBNP	Pro-Brain Natriuretic Peptide, N-Terminal	75+ years	All	0-450	pg/mL
PROG	Progesterone	All	M	<0.16	ng/mL
PROG	Progesterone	All	F	Follicular phase: <0.19 Ovulation: 0.05 – 4.14 Luteal phase: 4.11 – 14.5 Postmenopausal: <0.13 1st Trimester: 11.0-44.3 2nd Trimester: 25.4-83.4 3rd Trimester: 58.7-214	ng/mL
PSA	Prostate Specific Antigen	All	M	0.00-4.00	ng/mL
PSA	Prostate Specific Antigen	All	F	Not established	ng/mL
PSAFT	Prostate Specific Antigen, Percent Free	All	All	In patients with total PSA 4-10 ng/mL the probability of finding prostate cancer on needle biopsy by age in years is:  %fPSA    50-59    60-69    >69    % 0 - 10%    49%    58%    65% 11-18%    27%    34%    41% 19-25%    18%    24%    30% >25%    9%    12%    16%	
PTH	Parathyroid Hormone, Intact	All	All	15-65	pg/mL
PTHIO	Parathyroid Hormone, Intact, Intraoperative	All	All	15-65	pg/mL
RA	Rheumatoid Factor	All	All	<14	IU/mL
SFGLU	Glucose, Spinal Fluid	All	All	40-80	mg/dL
SHBGL	Sex Hormone Binding Globulin	20-49 years	M	17-56	nmol/L
SHBGL	Sex Hormone Binding Globulin	21-49 years	F	25-122	nmol/L
SHBGL	Sex Hormone Binding Globulin	50+ years	M	17-125	nmol/L
SHBGL	Sex Hormone Binding Globulin	50+ years	F	17-125	nmol/L
T3	Triiodothyronine	All	All	80-200	ng/dL
T4	Thyroxine	All	All	4.5-11.7	ug/dL
TBIL	Total Bilirubin	0 days	All	0.0-5.1	mg/dL
TBIL	Total Bilirubin	1-2 days	All	0.0-7.2	mg/dL
TBIL	Total Bilirubin	3-29 days	All	0.0-10.3	mg/dL
TBIL	Total Bilirubin	1+ months	All	0.0-1.2	mg/dL
TOBT	Tobramycin, Trough	All	All	<2.1	ug/mL
TRAN	Transferrin	All	All	200-360	mg/dL
TROPNT	High-sensitivity Troponin T	All	M	0-22	ng/L
TROPNT	High-sensitivity Troponin T	All	F	0-14	ng/L
TSH	Thyroid Stimulating Hormone	All	All	0.270-4.200	uIU/mL
TXG	Toxoplasma gondii Antibodies, IgG	All	All	<1.0	IU/mL
U24AMY	Amylase, Urine, 24 Hour	All	All	1-15	U/Hr

U24CA	Calcium, Urine, 24 Hour	All	All	Low Calcium Diet (<800 mg/day) 50-150 mg/24Hr Average Calcium Diet (800-1,000 mg/day) 100-250 mg/24Hr High Calcium Diet (>1,000 mg/day) >250 mg/24Hr	mg/24Hr
U24TP	Total Protein, Urine, 24 Hour	All	All	<150	mg/24Hr
URIC	Uric Acid	All	M	3.4-7.0	mg/dL
URIC	Uric Acid	All	F	2.4-5.7	mg/dL
URMA	Microalbumin, Urine, Random	All	All	<29.9	mgALB/g creat
VB12	Vitamin B12	All	All	232-1245	pg/mL

**Notes:**

*Some pediatric reference intervals are no longer available due to difficulties in obtaining samples from pediatric reference populations. TriCore is working towards establishing these important reference intervals and will include them as they become available.*

### Insulin-like Growth Factor Binding Protein-3

Males	ng/mL	
	Age (years)	ng/mL
	Low RI	High RI
0	919	2782
1	1030	2957
2	1183	3306
3	1343	3658
4	1511	4013
5	1687	4371
6	1868	4272
7	2053	5077
8	2239	5419
9	2423	5741
10	2603	6044
11	2775	6321
12	2935	6565
13	3080	6771
14	3205	6933
15	3379	7044
16	3379	7099
17	3423	7098
18	3441	7053
19	3439	6973
20	3420	6870
21	3390	6753
22	3352	6630
23	3310	6508
24	3267	6392
25	3225	6290
26	3188	6201
27	3154	6127
28	3125	6069
29	3102	6027
30	3082	5996
31	3064	5974
32	3064	5955
33	3026	5937
34	3004	5919
35	2981	5902
36	2956	5886
37	2930	5871
38	2903	5858
39	2875	5848
40	2846	5839

Female	ng/mL	
	Age (years)	ng/mL
	Low RI	High RI
0	1086	3146
1	1228	3352
2	1420	3752
3	1614	4136
4	1810	4505
5	2007	4860
6	2203	5202
7	2397	5535
8	2588	5858
9	2774	6172
10	2951	6474
11	3116	6761
12	3264	7031
13	3392	7282
14	3501	7512
15	3589	7720
16	3658	7905
17	3705	8065
18	3734	8198
19	3745	8302
20	3739	8374
21	3718	8413
22	3684	8418
23	3638	8394
24	3583	8342
25	3521	8265
26	3454	8167
27	3386	8055
28	3319	7934
29	3255	7808
30	3195	7681
31	3140	7552
32	3088	7422
33	3041	7292
34	2998	7165
35	2960	7043
36	2925	6929
37	2895	6826
38	2869	6734
39	2846	6652
40	2825	6580

41	2817	5832
42	2787	5828
43	2757	5826
44	2726	5827
45	2696	5829
46	2666	5835
47	2637	5845
48	2609	5860
49	2584	5881
50	2560	5904
51	2534	5923
52	2504	5933
53	2468	5927
54	2427	5906
55	2382	5874
56	2336	5836
57	2291	5795
58	2248	5756
59	2208	5722
60	2172	5694
61	2142	5677
62	2116	5668
63	2093	5663
64	2069	5657
65	2044	5645
66	2016	5625
67	1985	5597
68	1952	5562
69	1917	5521
70	1879	5472
71	1839	5416
72	1796	5349
73	1750	5272
74	1701	5182
75	1649	5084
76	1595	4979
77	1542	4871
78	1489	4761
>78	1463	4651

41	2804	6517
42	2785	6460
43	2765	6408
44	2744	6358
45	2723	6306
46	2700	6252
47	2677	6198
48	2654	6145
49	2633	6096
50	2614	6052
51	2598	6017
52	2588	5994
53	2583	5989
54	2585	6000
55	2590	6021
56	2594	6044
57	2594	6059
58	2587	6061
59	2574	6049
60	2556	6026
61	2535	5997
62	2512	5963
63	2488	5927
64	2465	5891
65	2444	5855
66	2425	5822
67	2408	5791
68	2391	5761
69	2374	5728
70	2355	5692
71	2333	5652
72	2308	5608
73	2281	5562
74	2252	5514
75	2220	5464
76	2187	5412
77	2151	5357
78	2114	5300
>78	2076	5239

### Insulin-like Growth Factor 1

Males	ng/mL	
	Age (years)	Low RI
0	12	95
1	12	96
2	14	104
3	19	116
4	27	134
5	37	156
6	47	184
7	58	216
8	68	254
9	77	296
10	86	343
11	94	392
12	101	434
13	108	467
14	115	489
15	120	501
16	125	503
17	129	495
18	132	476
19	134	450
20	136	421
21	137	394
22	137	370
23	136	348
24	135	328
25	132	310
26	130	295
27	128	282
28	125	271
29	123	263
30	120	257
31	118	253
32	116	250
33	114	247
34	111	244
35	109	242
36	107	239
37	105	236
38	103	234
39	101	231
40	99	229

Female	ng/mL	
	Age (years)	Low RI
0	14	92
1	19	104
2	26	128
3	34	155
4	43	185
5	53	216
6	64	250
7	75	286
8	87	324
9	100	363
10	112	398
11	123	427
12	132	451
13	140	468
14	146	480
15	151	485
16	154	485
17	156	479
18	156	466
19	155	449
20	152	429
21	148	410
22	143	392
23	138	375
24	134	359
25	130	343
26	126	329
27	122	315
28	118	303
29	115	292
30	112	281
31	109	271
32	107	263
33	104	255
34	102	248
35	100	242
36	98	238
37	97	234
38	95	231
39	93	228
40	91	227

41	96	226
42	94	223
43	92	221
44	91	218
45	89	216
46	87	214
47	85	211
48	83	209
49	81	207
50	79	205
51	77	203
52	75	201
53	73	200
54	71	198
55	69	196
56	67	195
57	65	194
58	64	193
59	62	192
60	61	191
61	60	190
62	59	189
63	59	188
64	58	188
65	57	187
66	57	186
67	56	186
68	56	185
69	55	185
70	55	185
71	54	184
72	54	184
73	53	184
74	53	184
75	52	184
76	51	183
77	51	184
78	50	184
>78	50	184

41	90	225
42	88	224
43	87	222
44	85	221
45	83	220
46	82	219
47	80	218
48	79	218
49	77	217
50	76	215
51	74	214
52	73	212
53	71	210
54	70	210
55	69	204
56	67	201
57	66	198
58	65	194
59	63	190
60	62	186
61	61	182
62	60	179
63	58	176
64	57	173
65	56	170
66	56	168
67	55	166
68	54	164
69	54	163
70	54	162
71	53	161
72	53	160
73	53	160
74	53	160
75	54	160
76	54	161
77	54	162
78	54	163
>78	55	164