

PLASMA AMINO ACIDS



The Great Plains Laboratory, Inc.

William Shaw, Ph.D. Director 11813 W. 77th Street, Lenexa, KS 66214 (913) 341-8949 Fax (913) 341-6207

LAB#: _____
 PATIENT: _____
 SEX: _____
 AGE: _____
 CLIENT#: _____

SPECIMEN VALIDITY

SPECIMEN MARKERS	RESULT	REFERENCE RANGE	PERCENTILE	
			5 th	32 nd
Glutamine/Glutamate	1.2	> 8.5	[Visual representation: bar between 5th and 32nd percentiles]	
Asparagine/Aspartate	1.6	> 7.5	[Visual representation: bar between 5th and 32nd percentiles]	
Ammonia	120	< 30 μ moles/100ml	68 th	95 th
SPECIMEN VALIDITY INDEX			[Visual representation: bar between 68th and 95th percentiles]	

ESSENTIAL / CONDITIONALLY INDISPENSABLE AMINO ACIDS

ESSENTIAL AMINO ACIDS	RESULT μ moles/100ml	REFERENCE RANGE	PERCENTILE				
			2.5 th	16 th	50 th	84 th	97.5 th
Methionine	1.9	1.4- 3.2	[Visual representation: bar between 2.5th and 97.5th percentiles]				
Taurine	25	4.5- 16	[Visual representation: bar between 2.5th and 97.5th percentiles]				
Lysine	15	12- 24	[Visual representation: bar between 2.5th and 97.5th percentiles]				
Threonine	9.4	6- 17	[Visual representation: bar between 2.5th and 97.5th percentiles]				
Tryptophan	2.3	2.5- 6	[Visual representation: bar between 2.5th and 97.5th percentiles]				
Phenylalanine	4.8	3- 8	[Visual representation: bar between 2.5th and 97.5th percentiles]				
Leucine	10	6- 15	[Visual representation: bar between 2.5th and 97.5th percentiles]				
Isoleucine	4.1	3.7- 9	[Visual representation: bar between 2.5th and 97.5th percentiles]				
Valine	15	13- 29	[Visual representation: bar between 2.5th and 97.5th percentiles]				
Arginine	1.3	4- 12	[Visual representation: bar between 2.5th and 97.5th percentiles]				
Histidine	7.1	6- 10	[Visual representation: bar between 2.5th and 97.5th percentiles]				

NONESSENTIAL AMINO ACIDS

NONESSENTIAL AMINO ACIDS	RESULT μ moles/100ml	REFERENCE RANGE	PERCENTILE				
			2.5 th	16 th	50 th	84 th	97.5 th
Alanine	36	20- 54	[Visual representation: bar between 2.5th and 97.5th percentiles]				
Aspartate	3.3	0.15- 1.6	[Visual representation: bar between 2.5th and 97.5th percentiles]				
Asparagine	5.2	3.5- 7.5	[Visual representation: bar between 2.5th and 97.5th percentiles]				
Glutamine	31	40- 69	[Visual representation: bar between 2.5th and 97.5th percentiles]				
Glutamate	25	2- 15	[Visual representation: bar between 2.5th and 97.5th percentiles]				
Cystine	2	1.5- 4.5	[Visual representation: bar between 2.5th and 97.5th percentiles]				
Glycine	35	14- 40	[Visual representation: bar between 2.5th and 97.5th percentiles]				
Tyrosine	5.6	3.5- 9	[Visual representation: bar between 2.5th and 97.5th percentiles]				
Serine	12	6- 16	[Visual representation: bar between 2.5th and 97.5th percentiles]				
Proline	15	9- 25	[Visual representation: bar between 2.5th and 97.5th percentiles]				



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GASTROINTESTINAL MARKERS

GI MARKERS	RESULT μmoles/100ml	REFERENCE RANGE	PERCENTILE				
			2.5 th	16 th	50 th	84 th	97.5 th
Ethanolamine	1.4	0.2- 1.3	[Bar chart showing result at 50th percentile]				
Threonine	9.4	6- 17	[Bar chart showing result at 50th percentile]				
Tryptophan	2.3	2.5- 6	[Bar chart showing result at 50th percentile]				
			68 th		95 th		
Alpha-Amino adipate	0.14	< 0.3	[Bar chart showing result at 50th percentile]				
Beta-alanine	0.82	< 1	[Bar chart showing result at 50th percentile]				
Beta-aminoisobutyrate	0.17	< 0.5	[Bar chart showing result at 50th percentile]				
Anserine	< dl	< 0.1	[Bar chart showing result at 50th percentile]				
Carnosine	< dl	< 0.1	[Bar chart showing result at 50th percentile]				
Gamma-aminobutyrate	< dl	< 0.1	[Bar chart showing result at 50th percentile]				
Hydroxyproline	2.1	< 3.5	[Bar chart showing result at 50th percentile]				

MAGNESIUM DEPENDANT MARKERS

MAGNESIUM MARKERS	RESULT μmoles/100ml	REFERENCE RANGE	PERCENTILE				
			2.5 th	16 th	50 th	84 th	97.5 th
Citrulline	3.4	1.6- 3.9	[Bar chart showing result at 50th percentile]				
Ethanolamine	1.4	0.2- 1.3	[Bar chart showing result at 50th percentile]				
Phosphoethanolamine	1.6	0.08- 1	[Bar chart showing result at 50th percentile]				
Phosphoserine	0.041	0.013- 0.025	[Bar chart showing result at 50th percentile]				
Serine	12	6- 16	[Bar chart showing result at 50th percentile]				
Taurine	25	4.5- 16	[Bar chart showing result at 50th percentile]				
			68 th		95 th		
Methionine Sulfoxide	0.63	< 1	[Bar chart showing result at 50th percentile]				

B6, B12, & FOLATE DEPENDANT MARKERS

B-VITAMIN MARKERS	RESULT μmoles/100ml	REFERENCE RANGE	PERCENTILE				
			2.5 th	16 th	50 th	84 th	97.5 th
Cystine	2	1.5- 4.5	[Bar chart showing result at 50th percentile]				
Alpha-amino-N-butyrates	1.9	0.8- 3.3	[Bar chart showing result at 50th percentile]				
Histidine	7.1	6- 10	[Bar chart showing result at 50th percentile]				
Serine	12	6- 16	[Bar chart showing result at 50th percentile]				
			68 th		95 th		
Cystathionine	< dl	< 0.1	[Bar chart showing result at 50th percentile]				
Alpha-amino adipate	0.14	< 0.3	[Bar chart showing result at 50th percentile]				
Beta-aminoisobutyrate	0.17	< 0.5	[Bar chart showing result at 50th percentile]				
Beta-alanine	0.82	< 1	[Bar chart showing result at 50th percentile]				
Homocystine	0.005	< 0.05	[Bar chart showing result at 50th percentile]				
Sarcosine	0.47	< 0.8	[Bar chart showing result at 50th percentile]				
1-Methylhistidine	0.28	< 1.5	[Bar chart showing result at 50th percentile]				
3-Methylhistidine	0.37	< 3.5	[Bar chart showing result at 50th percentile]				



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DETOXIFICATION MARKERS						
DETOX MARKERS	RESULT μmoles/100ml	REFERENCE RANGE	PERCENTILE			
			2.5 th	16 th	50 th	84 th 97.5 th
Methionine	1.9	1.4- 3.2	[Bar chart showing result at 2.5th percentile]			
Cystine	2	1.5- 4.5	[Bar chart showing result at 16th percentile]			
Taurine	25	4.5- 16	[Bar chart showing result at 84th percentile]			
Glutamine	31	40- 69	[Bar chart showing result at 2.5th percentile]			
Glycine	35	14- 40	[Bar chart showing result at 84th percentile]			
Aspartate	3.3	0.15- 1.6	[Bar chart showing result at 84th percentile]			

NEUROLOGICAL MARKERS						
NEUROLOGICAL MARKERS	RESULT μmoles/100ml	REFERENCE RANGE	PERCENTILE			
			2.5 th	16 th	50 th	84 th 97.5 th
Glutamine	31	40- 69	[Bar chart showing result at 2.5th percentile]			
Phenylalanine	4.8	3- 8	[Bar chart showing result at 50th percentile]			
Tyrosine	5.6	3.5- 9	[Bar chart showing result at 50th percentile]			
Tryptophan	2.3	2.5- 6	[Bar chart showing result at 16th percentile]			
Taurine	25	4.5- 16	[Bar chart showing result at 84th percentile]			
Cystine	2	1.5- 4.5	[Bar chart showing result at 16th percentile]			
			68 th		95 th	
Beta-alanine	0.82	< 1	[Bar chart showing result at 68th percentile]			
Cystathionine	< dl	< 0.1	[Bar chart showing result at 68th percentile]			

UREA CYCLE METABOLITES						
UREA CYCLE METABOLITES	RESULT μmoles/100ml	REFERENCE RANGE	PERCENTILE			
			2.5 th	16 th	50 th	84 th 97.5 th
Arginine	1.3	4- 12	[Bar chart showing result at 2.5th percentile]			
Aspartate	3.3	0.15- 1.6	[Bar chart showing result at 84th percentile]			
Citrulline	3.4	1.6- 3.9	[Bar chart showing result at 84th percentile]			
Ornithine	11	3- 10	[Bar chart showing result at 84th percentile]			
Urea	180	200- 620	[Bar chart showing result at 2.5th percentile]			
Glutamine	31	40- 69	[Bar chart showing result at 2.5th percentile]			
Asparagine	5.2	3.5- 7.5	[Bar chart showing result at 50th percentile]			

SPECIMEN DATA

Comments: Date Collected: Date Received: Date Completed: Methodology: HPLC
 Reference ranges are representative of a healthy population under fasting (6-8 hrs) conditions.

V07.02