

Plasma Amino Acids by LC-MS/MS

Normal Reference Ranges

Order Code	Test Code	Order Name	Units	New Age Range	New Normal Range	Old Normal Range
MSAAP	MS1MHP	1-Methylhistidine (Plasma)	μmol/L	0D - 30D	0-9	<10
			μmol/L	31D - 365D	0-16	<17
			μmol/L	≥366D	0-22	<23
	MS3MHP	3-Methylhistidine (Plasma)	μmol/L	0D - 30D	0-3	<6
			μmol/L	31D - 365D	0-4	<9
			μmol/L	≥366D	0-5	<10
	MSALAP	Alanine (Plasma)	μmol/L	0D - 30D	140-480	147-503
			μmol/L	31D - 365D	150-520	147-520
			μmol/L	≥366D	160-530	67-597
	MSAILP	Allo-Isoleucine (Plasma)	μmol/L	0D - 30D	0-5	<1
			μmol/L	31D - 365D		<1
			μmol/L	≥366D		<1
	MSAABP	Alpha-Aminobutyric Acid (Plasma)	μmol/L	0D - 30D	0-40	New Amino Acid offered
			μmol/L	31D - 365D		
			μmol/L	≥366D		
	MSAADP	Alpha-Aminoadipic Acid (Plasma)	μmol/L	0D - 30D	0-4	New Amino Acid offered
			μmol/L	31D - 365D		
			μmol/L	≥366D		
	MSARGP	Arginine (Plasma)	μmol/L	0D - 30D	16-140	36-150
			μmol/L	31D - 365D	35-140	27-153
			μmol/L	≥366D	35-125	14-171
	MSASAP	Argininosuccinic Acid (Plasma)	μmol/L	0D - 30D	Qualitative Only	New Amino Acid offered
			μmol/L	31D - 365D		
			μmol/L	≥366D		
	MSANHP	ASA Anhydrides (Plasma)	μmol/L	0D - 30D	Qualitative Only	New Amino Acid offered
			μmol/L	31D - 365D		
			μmol/L	≥366D		
	MSASNP	Asparagine (Plasma)	μmol/L	0D - 30D	20-80	<107
			μmol/L	31D - 365D		12-95
			μmol/L	≥366D		8-109
	MSASPP	Aspartic Acid (Plasma)	μmol/L	0D - 30D	0-45	<43
			μmol/L	31D - 365D	0-30	<39
			μmol/L	≥366D	0-15	<35
	MSBALP	Beta-Alanine (Plasma)	μmol/L	0D - 30D	0-25	New Amino Acid offered
			μmol/L	31D - 365D		
			μmol/L	≥366D		
	MSAIBP	Beta-Aminoisobutyric Acid (Plasma)	μmol/L	0D - 30D	0-15	New Amino Acid offered
			μmol/L	31D - 365D	0-10	
			μmol/L	≥366D		
	MSCITP	Citrulline (Plasma)	μmol/L	0D - 30D	7-40	7-47
			μmol/L	31D - 365D	10-45	7-44
			μmol/L	≥366D		5-59
	MSCTHP	Cystathionine (Plasma)	μmol/L	0D - 30D	0-5	<2
			μmol/L	31D - 365D		<11
			μmol/L	≥366D		<2
	MSCYSP	Cystine (Plasma)	μmol/L	0D - 30D	11-51	11-51
			μmol/L	31D - 365D	10-46	10-46
			μmol/L	≥366D	7-54	7-54

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MSAAP	MSETHP	Ethanolamine (Plasma)	μmol/L	0D - 30D	0-64	New Amino Acid offered
			μmol/L	31D - 365D	0-16	
			μmol/L	≥366D	0-10	
	MSGABP	Gamma-Aminobutyric Acid (Plasma)	μmol/L	0D - 30D	0-5	New Amino Acid offered
			μmol/L	31D - 365D		
			μmol/L	≥366D		
	MSGLUP	Glutamic Acid (Plasma)	μmol/L	0D - 30D	30-240	11-174
			μmol/L	31D - 365D	30-210	11-202
			μmol/L	≥366D	15-130	20-127
	MSGLNP	Glutamine (Plasma)	μmol/L	0D - 30D	295-900	375-969
			μmol/L	31D - 365D	400-850	238-945
			μmol/L	≥366D	380-680	245-929
	MSGLYP	Glycine (Plasma)	μmol/L	0D - 30D	160-470	139-473
			μmol/L	31D - 365D	120-375	81-475
			μmol/L	≥366D	140-420	81-397
	MSHISP	Histidine (Plasma)	μmol/L	0D - 30D	50-130	40-107
			μmol/L	31D - 365D		33-126
			μmol/L	≥366D		46-123
	MSHCTP	Homocitrulline (Plasma)	μmol/L	0D - 30D	0-8	New Amino Acid offered
			μmol/L	31D - 365D		
			μmol/L	≥366D		
	MSHCYP	Homocystine (Plasma)	μmol/L	0D - 30D	0-3	<6
			μmol/L	31D - 365D		<3
			μmol/L	≥366D		<3
	MSHLYP	Hydroxylysine (Plasma)	μmol/L	0D - 30D	0-5	New Amino Acid offered
			μmol/L	31D - 365D		
			μmol/L	≥366D		
	MSHYPP	Hydroxyproline (Plasma)	μmol/L	0D - 30D	15-90	21-96
			μmol/L	31D - 365D	10-70	<81
			μmol/L	≥366D	5-40	<52
	MSILEP	Isoleucine (Plasma)	μmol/L	0D - 30D	20-110	18-92
			μmol/L	31D - 365D	30-120	22-93
			μmol/L	≥366D		35-119
	MSLEUP	Leucine (Plasma)	μmol/L	0D - 30D	50-180	51-160
			μmol/L	31D - 365D		37-185
			μmol/L	≥366D	60-180	60-267
	MSLYSP	Lysine (Plasma)	μmol/L	0D - 30D	70-270	66-283
			μmol/L	31D - 365D	80-260	62-249
			μmol/L	≥366D	85-230	60-260
	MSMETP	Methionine (Plasma)	μmol/L	0D - 30D	15-55	16-47
			μmol/L	31D - 365D		9-40
			μmol/L	≥366D	15-40	10-53
	MSORNP	Ornithine (Plasma)	μmol/L	0D - 30D	30-180	30-195
			μmol/L	31D - 365D	30-140	28-149
			μmol/L	≥366D	25-110	20-137
	MSPHEP	Phenylalanine (Plasma)	μmol/L	0D - 30D	30-95	34-80
			μmol/L	31D - 365D	30-90	24-95
			μmol/L	≥366D	30-82	15-102

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MSAAP	MSPROP	Proline (Plasma)	μmol/L	0D - 30D	110-340	92-330
			μmol/L	31D - 365D	100-320	61-331
			μmol/L	≥366D	90-350	53-340
	MSSARP	Sarcosine (Plasma)	μmol/L	0D - 30D	0-5	<8
			μmol/L	31D - 365D		<9
			μmol/L	≥366D		<5
	MSSERP	Serine (Plasma)	μmol/L	0D - 30D	90-340	44-337
			μmol/L	31D - 365D	90-275	69-226
			μmol/L	≥366D	60-170	54-221
	MSTAUP	Taurine (Plasma)	μmol/L	0D - 30D	28-307	28-307
			μmol/L	31D - 365D	28-292	28-292
			μmol/L	≥366D	12-253	12-253
	MSTHRP	Threonine (Plasma)	μmol/L	0D - 30D	60-400	43-427
			μmol/L	31D - 365D	60-310	43-310
			μmol/L	≥366D	60-190	62-190
	MSTRPP	Tryptophan (Plasma)	μmol/L	0D - 30D	15-75	<51
			μmol/L	31D - 365D	20-85	7-70
			μmol/L	≥366D	25-80	13-78
	MSTYRP	Tyrosine (Plasma)	μmol/L	0D - 30D	30-140	17-150
			μmol/L	31D - 365D	30-130	26-144
			μmol/L	≥366D	35-110	30-132
	MSVALP	Valine (Plasma)	μmol/L	0D - 30D	80-270	85-229
			μmol/L	31D - 365D	90-310	72-268
			μmol/L	≥366D	120-320	67-302
Testing No longer offered		Anserine	μmol/L	0D - 30D	Testing no longer offered	<5
			μmol/L	31D - 365D		<67
			μmol/L	≥366D		<63
		Carnosine	μmol/L	0D - 30D	Testing no longer offered	<22
			μmol/L	31D - 365D		<40
			μmol/L	≥366D		<34
		Phosphoethanolamine	μmol/L	0D - 30D	Testing no longer offered	<8
			μmol/L	31D - 365D		<16
			μmol/L	≥366D		<9
		Phosphoserine	μmol/L	0D - 30D	Testing no longer offered	<31
			μmol/L	31D - 365D		<23
			μmol/L	≥366D		<20