Test Definition: AAQP

Amino Acids, Quantitative, Plasma

Reporting Title: Amino Acids, QN, P
Performing Location: Rochester

Specimen Requirements:

Collection Container/Tube:
Preferred: Green top (sodium heparin)
Acceptable: EDTA, PST, lithium heparin
Submission Container/Tube: Plastic vial
Specimen Volume: 0.5 mL
Collection Instructions:
1. Fasting (4 hours or more in infants).
2. Spin down promptly.
Additional Information:
1. Patient's age is required.
2. Include family history, clinical condition (asymptomatic or acute episode), diet, and drug therapy information.
Forms: If not ordering electronically, submit a Biochemical Genetics Request Form (Supply T439) with the specimen.

Specimen Type	Temperature	Time
Plasma	Frozen	14 days

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
34449	Phosphoserine	Numeric	nmol/mL	20654-0
34457	Phosphoethanolamine	Numeric	nmol/mL	26612-2
3512	Taurine	Numeric	nmol/mL	20657-3
3517	Asparagine	Numeric	nmol/mL	20638-3
3516	Serine	Numeric	nmol/mL	20656-5
34458	Hydroxyproline	Numeric	nmol/mL	20647-4
3522	Glycine	Numeric	nmol/mL	20644-1
3518	Glutamine	Numeric	nmol/mL	20643-3
34459	Aspartic Acid	Numeric	nmol/mL	20639-1
34460	Ethanolamine	Numeric	nmol/mL	26608-0
3535	Histidine	Numeric	nmol/mL	20645-8
3515	Threonine	Numeric	nmol/mL	20658-1
3521	Citrulline	Numeric	nmol/mL	20640-9

Result ID	Reporting Name	Type	Unit	LOINC®
34461	Sarcosine	Numeric	nmol/mL	26613-0
3532	Beta-Alanine	Numeric	nmol/mL	26604-9
3523	Alanine	Numeric	nmol/mL	20636-7
3520	Glutamic Acid	Numeric	nmol/mL	20642-5
34453	1-Methylhistidine	Numeric	nmol/mL	20633-4
34454	3-Methylhistidine	Numeric	nmol/mL	20635-9
32341	Argininosuccinic Acid	Numeric	nmol/mL	In Process
34455	Carnosine	Numeric	nmol/mL	26606-4
34462	Anserine	Numeric	nmol/mL	26599-1
34456	Homocitrulline	Numeric	nmol/mL	55876-7
3536	Arginine	Numeric	nmol/mL	20637-5
34450	Alpha-aminoadipic Acid	Numeric	nmol/mL	26600-7
34463	Gamma-amino-n-butyric Acid	Numeric	nmol/mL	26609-8
34452	Beta-aminoisobutyric Acid	Numeric	nmol/mL	26605-6
3524	Alpha-amino-n-butyric Acid	Numeric	nmol/mL	20634-2
34464	Hydroxylysine	Numeric	nmol/mL	26610-6
3519	Proline	Numeric	nmol/mL	20655-7
3533	Ornithine	Numeric	nmol/mL	20652-4
34451	Cystathionine	Numeric	nmol/mL	26607-2
3526	Cystine	Numeric	nmol/mL	22672-0
3534	Lysine	Numeric	nmol/mL	20650-8
3527	Methionine	Numeric	nmol/mL	20651-6
3525	Valine	Numeric	nmol/mL	20661-5
3530	Tyrosine	Numeric	nmol/mL	20660-7
3528	Isoleucine	Numeric	nmol/mL	20648-2
3529	Leucine	Numeric	nmol/mL	20649-0
3531	Phenylalanine	Numeric	nmol/mL	14875-9
34465	Tryptophan	Numeric	nmol/mL	20659-9
32347	Allo-isoleucine	Numeric	nmol/mL	22670-4
3570	Interpretation (AAQP)	Alphanumeric		N/A

CPT Code: 1 × 82139

Reference Values:

Plasma Amino Acid Reference Values (nmol/mL)	Age Groups		
	<24 Months (n=191)	2-17 Years (n=441)	> or =18 Years (n=148)
Phosphoserine (PSer)	<109	<95	<18
Phosphoethanolamine (PEtN)	<6	<5	<12
Taurine (Tau)	37-177	38-153	42-156
Asparagine (Asn)	25-91	29-87	37-92
Serine (Ser)	69-271	71-208	63-187
Hydroxyproline (Hyp)	8-61	7-35	4-29
Glycine (Gly)	111-426	149-417	126-490
Glutamine (Gln)	316-1020	329-976	371-957
Aspartic Acid (Asp)	2-20	<11	<7
Ethanolamine (EtN)	<70	<64	<67
Histidine (His)	10-116	12-132	39-123
Threonine (Thr)	47-237	58-195	85-231
Citrulline (Cit)	9-38	11-45	17-46
Sarcosine (Sar)	<5	<5	<5
b-Alanine (bAla)	<28	<27	<29
Alanine (Ala)	139-474	144-557	200-579
Glutamic Acid (Glu)	31-202	22-131	13-113
1-Methylhistidine (1MHis)	<11	<20	<28
3-Methylhistidine (3MHis)	<1	<1	2-9
Argininosuccinic Acid (Asa)	<2	<2	<2
Carnosine (Car)	<13	<1	<1
Anserine (Ans)	<1	<1	<1
Homocitruline (Hcit)	<5	<2	<2
Arginine (Arg)	29-134	31-132	32-120
a-Aminoadipic Acid (Aad)	<4	<3	<3
g-Amino-n-butyric Acid (GABA)	<4	<3	<2
b-Aminoisobutyric Acid (bAib)	<9	<5	<5
a-Amino-n-butyric Acid (Abu)	7-28	7-31	9-37

Hydroxylysine (Hyl)	<4	<3	<2
Proline (Pro)	85-303	80-357	97-368
Ornithine (Orn)	20-130	22-97	38-130
Cystathionine (Cth)	<2	<2	<5
Cystine (Cys)	2-32	2-36	3-95
Lysine (Lys)	49-204	59-240	103-255
Methionine (Met)	11-35	11-37	4-44
Valine (Val)	83-300	106-320	136-309
Tyrosine (Tyr)	26-115	31-106	31-90
Homocystine (Hcy)	NA	NA	<5
Isoleucine (Ile)	31-105	30-111	36-107
Leucine (Leu)	48-175	51-196	68-183
Phenylalanine (Phe)	28-80	30-95	35-80
Tryptophan (Trp)	17-75	23-80	29-77
Alloisoleucine (Allolle)	<2	<3	<5