

**Reporting Title:** Amino Acids, QN, CSF**Performing Location:** Rochester**Additional Testing Requirements:**

This test should be ordered in conjunction with AAQP / Amino Acids, Quantitative, Plasma. The specimens for both tests (AAQP / Amino Acids, Quantitative, Plasma and this test) should be collected at the same time.

**Necessary Information:**

1. Patient's age is required.
2. Include family history, clinical condition (asymptomatic or acute episode), diet, and drug therapy information

**Specimen Requirements:**

Container/Tube: Sterile vial

Specimen Volume: 0.2 mL

Collection Instructions: Collect specimen from second collection vial.

**Specimen Minimum Volume:**

0.1 mL

**Forms:**

If not ordering electronically, complete, print, and send a Biochemical Genetics Test Request (T798) with the specimen.

Specimen Type	Temperature	Time	Special Container
CSF	Frozen	14 days	

**Result Codes:**

Result ID	Reporting Name	Type	Unit	LOINC®
50435	Interpretation	Alphanumeric		49303-1
81934	Taurine	Numeric	nmol/mL	26614-8
30109	Asparagine	Numeric	nmol/mL	26603-1
30108	Serine	Numeric	nmol/mL	22644-9
34566	Hydroxyproline	Numeric	nmol/mL	26596-7

Result ID	Reporting Name	Type	Unit	LOINC®
30115	Glycine	Numeric	nmol/mL	22650-6
30111	Glutamine	Numeric	nmol/mL	22641-5
34567	Aspartic Acid	Numeric	nmol/mL	22655-5
34568	Ethanolamine	Numeric	nmol/mL	26593-4
30128	Histidine	Numeric	nmol/mL	9453-2
30107	Threonine	Numeric	nmol/mL	22643-1
30117	Citrulline	Numeric	nmol/mL	22654-8
34569	Sarcosine	Numeric	nmol/mL	26598-3
34570	Beta-alanine	Numeric	nmol/mL	26589-2
30116	Alanine	Numeric	nmol/mL	22657-1
30110	Glutamic Acid	Numeric	nmol/mL	22652-2
34571	1-Methylhistidine	Numeric	nmol/mL	26584-3
34572	3-Methylhistidine	Numeric	nmol/mL	26585-0
34573	Argininosuccinic Acid	Numeric	nmol/mL	40838-5
34576	Homocitrulline	Numeric	nmol/mL	55875-9
30129	Arginine	Numeric	nmol/mL	22656-3
34577	Alpha-aminoadipic Acid	Numeric	nmol/mL	26587-6
34578	Gamma-amino-n-butyric Acid	Numeric	nmol/mL	26594-2
34579	Beta-aminoisobutyric Acid	Numeric	nmol/mL	26590-0
30118	Alpha-amino-n-butyric Acid	Numeric	nmol/mL	26586-8
34580	Hydroxylysine	Numeric	nmol/mL	26595-9
30112	Proline	Numeric	nmol/mL	22645-6
30126	Ornithine	Numeric	nmol/mL	22647-2
34581	Cystathionine	Numeric	nmol/mL	26592-6
30120	Cystine	Numeric	nmol/mL	22653-0
30127	Lysine	Numeric	nmol/mL	22651-4
30121	Methionine	Numeric	nmol/mL	22648-0
30119	Valine	Numeric	nmol/mL	22649-8
30124	Tyrosine	Numeric	nmol/mL	22642-3
30122	Isoleucine	Numeric	nmol/mL	22659-7
30123	Leucine	Numeric	nmol/mL	9412-8

Result ID	Reporting Name	Type	Unit	LOINC®
30125	Phenylalanine	Numeric	nmol/mL	22646-4
34582	Tryptophan	Numeric	nmol/mL	26602-3
34583	Allo-isoleucine	Numeric	nmol/mL	22658-9

LOINC and CPT codes are provided by the performing laboratory.

**Supplemental Report:**

No

**CPT Code Information:**

82139

**Reference Values:**

Amino Acid	Age groups			
	< or =31 days	32 days-23 months	2-18 years	> or =19 years
Taurine (Tau)	8-28	4-13	4-10	3-9
Asparagine (Asn)	7-25	5-17	4-12	5-14
Serine (Ser)	43-127	37-87	22-57	18-58
Hydroxyproline (Hyp)	<12	<8	<3	<3
Glycine (Gly)	<60	<27	<20	<28
Glutamine (Gln)	447-1547	384-716	375-770	452-1283
Aspartic Acid (Asp)	<12	<12	<12	<12
Ethanolamine (EtN)	11-152	6-41	7-25	6-24
Histidine (His)	19-63	12-32	9-26	12-36
Threonine (Thr)	35-212	19-89	13-51	13-57
Citrulline (Cit)	<6	<5	<4	<4
Sarcosine (Sar)	<21	<21	<21	<21
Beta-alanine (bAla)	<17	<17	<17	<17
Alanine (Ala)	20-92	18-69	16-54	22-80
Glutamic Acid (Glu)	<12	<4	<3	<2

1-Methylhistidine (1MHis)	<5	<1	<1	<3
3-Methylhistidine (3MHis)	<4	<1	<3	<5
Argininosuccinic Acid (Asa)	<4	<4	<4	<4
Homocitrulline (Hcit)	<1	<1	<1	<1
Arginine (Arg)	7-37	11-36	13-30	14-32
Alpha-aminoadipic Acid (Aad)	<2	<2	<2	<2
Gamma-amino-n-butyric Acid (GABA)	<10	<10	<10	<10
Beta-aminoisobutyric Acid (bAib)	<1	<1	<1	<1
Alpha-amino-n-butyric Acid (Abu)	<21	<7	<5	<10
Hydroxylysine (Hyl)	<1	<1	<1	<1
Proline (Pro)	<14	<4	<4	<2
Ornithine (Orn)	<32	<15	<12	<15
Cystathionine (Cth)	<4	<1	<1	<2
Cystine (Cys)	<3	<3	<3	<3
Lysine (Lys)	16-67	17-41	13-45	23-54
Methionine (Met)	<19	<7	<5	<12
Valine (Val)	16-83	10-36	10-27	13-52
Tyrosine (Tyr)	<70	<22	<16	<65
Isoleucine (Ile)	2-30	2-14	3-11	3-17
Leucine (Leu)	14-72	9-25	8-23	10-53
Phenylalanine (Phe)	9-49	7-18	5-18	8-23
Tryptophan (Trp)	<14	<14	<14	<14
Allo-isoleucine (AlloIle)	<2	<2	<2	<2

All results reported in nmol/mL