
Lab Dept: Other Fluids

Test Name: AMINO ACID, CSF

General Information

Lab Order Codes: AACSF

Synonyms: N/A

CPT Codes: 82139 – Amino acids; 6 or more, quantitative, each specimen

Test Includes: Alanine, B-alanine, A-aminoadipic acid, B-aminobutyric acid, anserine, arginine, asparagine, aspartic acid, carnosine, citrulline, cystine, cystathionine, glutamic acid, glutamine, glycine, histidine, homocystine, hydroxylysine, hydroxyproline, isoleucine, leucine, lysine, methionine, 1-methylhistidine, 3-methylhistidine, ornithine, phenylalanine, proline, sarcosine, serine, taurine, threonine, tyrosine, valine.

Logistics

Test Indications: To monitor glutamine for hyperammonemia, glycine to diagnose nonketotic hyperglycinemia, or other amino acids in cerebrospinal fluid.

Lab Testing Sections: Chemistry – Sendouts (Fairview Test: CAA)

Referred to: Fairview-University Diagnostic Laboratories, Biochemical Genetics

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 - 3 days, test performed Monday - Friday

Special Instructions: Provide clinical history

Specimen

Specimen Type: CSF

Container: Screw capped, sterile vial

Draw Volume: 0.5 mL (Minimum: 0.25 mL) CSF

Processed Volume: Same as Draw Volume

Collection:	Routine CSF collection
Special Processing:	Lab Staff: Centrifuge specimen and aliquot 0.5 mL CSF, 0.25 mL minimum in a plastic, screw capped vial. Store in freezer. Ship frozen. Forward promptly.
Patient Preparation:	None
Sample Rejection:	Mislabeled or unlabeled specimens

Interpretive

Reference Range: An interpretation of the report can be requested.

Amino Acid	umol/dL
Alanine	1.3 - 3.7
Arginine	<3.0
Aspartic acid	<1.0
Glutamic acid	<11.8
Glutamine	
0 - 2 weeks	46.5 - 86.2
2 weeks - 6 months	40.4 - 77.3
6 – 12 months	34.2 - 63.0
12 - 30 months	24.6 - 49.3
>30 months	16.1 - 53.3
Glycine	<2.1
Histidine	<3.2
Isoleucine	<1.6
Leucine	<1.9
Lysine	1.3 - 4.2
Methionine	<1.0
Ornithine	<1.0
Phenylalanine	<1.1
Proline	<1.0
Serine	1.3 - 7.0
Taurine	<1.5
Threonine	1.0 - 5.1

Tyrosine	<1.2
Valine	<2.7

Critical Values:

N/A

Limitations:

N/A

Methodology:

High performance ion exchange liquid chromatography

References:

[Fairview University Laboratory Web Page](#) January 2017

Updates:

12/7/2015: Order code change AASF to AACSF
1/23/2018: Ref range updates.