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**Lab Dept:** Other Fluids

**Test Name:** AMINO ACID, CSF

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***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.

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***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

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***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

<b>Collection:</b>	Routine CSF collection
<b>Special Processing:</b>	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.
<b>Patient Preparation:</b>	None
<b>Sample Rejection:</b>	Mislabeled or unlabeled specimens

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***Interpretive***

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

<b>Amino Acid</b>	<b>umol/dL</b>
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.