



Procedure	Result	Units	Ref Interval	Accession	Collected	Received	Reported/Verified
Amino Acids, CSF Interpretation	See Note			19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Alpha-amino butyric acid, CSF	8.1 H	umol/L	[<=8.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Alanine, CSF	46.1 H	umol/L	[16.0-46.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Allo-isoleucine, CSF	2.1 H	umol/L	[<=2.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Alpha-aminoadipic acid, CSF	2.1 H	umol/L	[<=2.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Anserine, CSF	7.1 H	umol/L	[<=7.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Arginine, CSF	31.1 H	umol/L	[8.0-31.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Argininosuccinic Acid, CSF	2.1 H	umol/L	[<=2.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Asparagine, CSF	13.1 H	umol/L	[4.0-13.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Aspartic Acid, CSF	5.1 H	umol/L	[<=5.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Beta-amino isobutyric acid, CSF	5.1 H	umol/L	[<=5.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Beta-alanine, CSF	25.1 H	umol/L	[<=25.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Citrulline, CSF	5.1 H	umol/L	[<=5.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Cystathionine, CSF	5.1 H	umol/L	[<=5.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Cystine, CSF	5.1 H	umol/L	[<=5.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Ethanolamine, CSF	40.1 H	umol/L	[<=40.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Gamma-amino butyric acid, CSF	5.1 H	umol/L	[<=5.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Glutamic Acid, CSF	5.1 H	umol/L	[<=5.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Glutamine, CSF	630.1 H	umol/L	[330.0-630.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Glycine, CSF	20.1 H	umol/L	[5.0-20.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Histidine, CSF	24.1 H	umol/L	[7.0-24.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Homocitrulline, CSF	5.1 H	umol/L	[<=5.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Homocystine, CSF	2.1 H	umol/L	[<=2.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Hydroxylysine, CSF	5.1 H	umol/L	[<=5.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Hydroxyproline, CSF	4.1 H	umol/L	[<=4.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Isoleucine, CSF	12.1 H	umol/L	[<=12.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Leucine, CSF	22.1 H	umol/L	[5.0-22.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Lysine, CSF	36.1 H	umol/L	[10.0-36.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Methionine, CSF	7.1 H	umol/L	[2.0-7.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Ornithine, CSF	10.1 H	umol/L	[<=10.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Phenylalanine, CSF	20.1 H	umol/L	[6.0-20.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Proline, CSF	5.1 H	umol/L	[<=5.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Sarcosine, CSF	5.1 H	umol/L	[<=5.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Serine, CSF	66.1 H	umol/L	[18.0-66.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Taurine, CSF	13.1 H	umol/L	[<=13.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Threonine, CSF	59.1 H	umol/L	[14.0-59.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Tryptophan, CSF	5.1 H	umol/L	[<=5.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Tyrosine, CSF	23.1 H	umol/L	[5.0-23.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00
Valine, CSF	30.1 H	umol/L	[8.0-30.0]	19-263-900068	20-Sep-19 09:27:00	20-Sep-19 10:12:00	20-Sep-19 10:37:00

20-Sep-19 09:27:00 Amino Acids, CSF Interpretation:

\* Abnormal, # = Corrected, C = Critical, f = Footnote, H = High, L = Low, t = Interpretive Text, @ = Reference Lab

---

INTERPRETIVE INFORMATION: Amino Acids Quantitative, CSF

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement B: [aruplab.com/CS](http://aruplab.com/CS)