

CSF Amino Acids by LC-MS/MS

Normal Reference Ranges

Order Code	Test Code	Order Name	Units	New Age Range	New Normal Range	Old Normal Range
MSAAC	MSALAC	Alanine (CSF)	μmol/L	All ages	10-64	10-64
	MSARGC	Arginine (CSF)	μmol/L	All ages	0-24	<25
	MSASNC	Asparagine (CSF)	μmol/L	All ages	0-13	<14
	MSASPC	Aspartic Acid (CSF)	μmol/L	All ages	0-3	<4
	MSCITC	Citrulline (CSF)	μmol/L	All ages	0-5	<6
	MSCTHC	Cystathionine (CSF)	μmol/L	All ages	0-2	<3
	MSCYSC	Cystine (CSF)	μmol/L	All ages	0-2	<3
	MSETHC	Ethanolamine (CSF)	μmol/L	All ages	0-22	<51
	MSGABC	Gamma-Aminobutyric Acid (CSF)	μmol/L	All ages	0-4	<5
	MSGLUC	Glutamic Acid (CSF)	μmol/L	All ages	0-5	<6
	MSGLNC	Glutamine (CSF)	μmol/L	All ages	120-1875	120-1875
	MSGLYC	Glycine (CSF)	μmol/L	All ages	2-18	2-18
	MSHISC	Histidine (CSF)	μmol/L	All ages	4-68	4-68
	MSHCYC	Homocystine (CSF)	μmol/L	All ages	0-3	<4
	MSHYPC	Hydroxyproline (CSF)	μmol/L	All ages	0-5	<6
	MSILEC	Isoleucine (CSF)	μmol/L	All ages	1-11	1-11
	MSLEUC	Leucine (CSF)	μmol/L	All ages	2-30	2-30
	MSLYSC	Lysine (CSF)	μmol/L	All ages	5-89	5-89
	MSMETC	Methionine (CSF)	μmol/L	All ages	1-14	1-14
	MSORNC	Ornithine (CSF)	μmol/L	All ages	1-9	1-9

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Order Code	Test Code	Order Name	Units	New Age Range	New Normal Range	Old Normal Range
MSAAC	MSPHEC	Phenylalanine (CSF)	μmol/L	All ages	2-50	2-50
	MSPROC	Proline (CSF)	μmol/L	All ages	0-15	<16
	MSSERC	Serine (CSF)	μmol/L	0D - 30D	20-80	20-80
	MSTAUC	Taurine (CSF)	μmol/L	All ages	3-44	3-44
	MSTHRC	Threonine (CSF)	μmol/L	All ages	15-141	15-141
	MSTRPC	Tryptophan (CSF)	μmol/L	All ages	0-10	<11
	MSTYRC	Tyrosine (CSF)	μmol/L	All ages	3-50	3-50
	MSVALC	Valine (CSF)	μmol/L	All ages	3-45	3-45
	MSSAC	Serine + Asparagine (CSF)	μmol/L	All ages	15-61	15-61
Testing no longer offered		Carnosine	μmol/L	All ages	Testing no longer offered	<11
		Phosphoserine	μmol/L	All ages	Testing no longer offered	<15
		Phosphoethanolamine	μmol/L	All ages	Testing no longer offered	<14