

Tandem MS 1 (MSMS1QC)

Set 2 - June 2021

Analysis Method: Derivatized – MS/MS non-kit

Expiration Date: August 2022

Material Storage: -20°C ± 10°C

Units: µmol/L blood

Lot	Analyte	Enrichment	Mean Value	95% LL	95% UL
A2015	Alanine (Ala)	0.0	300.4	255.1	345.6
A2015	Arginine (Arg)	0.0	9.6	5.9	13.3
A2015	Citrulline (Cit)	0.0	15.0	12.1	18.0
A2015	Glycine (Gly)	0.0	362.8	314.8	410.8
A2015	Leucine (Leu)	0.0	70.3	60.4	80.1
A2015	Methionine (Met)	0.0	12.5	10.9	14.1
A2015	Ornithine (Orn)	0.0	152.2	115.0	189.4
A2015	Phenylalanine (Phe)	0.0	35.7	29.8	41.5
A2015	Creatine (CRE)	0.0	223.5	197.3	249.7
A2015	Guanidinoacetic Acid (GUAC)	0.0	1.5	1.2	1.9
A2015	Creatinine (CRN)	0.0	41.7	33.2	50.2
A2015	Succinylacetone (SUAC)	0.00	0.84	0.35	1.34
A2015	Tyrosine (Tyr)	0.0	30.6	26.1	35.0
A2015	Valine (Val)	0.0	72.2	63.5	80.9
A2015	Free carnitine (C0)	0.00	19.32	17.04	21.61
A2015	Acetylcarnitine (C2)	0.00	10.96	9.58	12.34
A2015	Propionylcarnitine (C3)	0.00	1.10	1.00	1.30
A2015	Malonylcarnitine (C3DC)	0.00	0.03	0.02	0.05
A2015	Butyrylcarnitine (C4)	0.00	0.10	0.09	0.12
A2015	Hydroxybutyrylcarnitine (C4OH)	0.00	0.08	0.06	0.09
A2015	Isovalerylcarnitine (C5)	0.00	0.07	0.06	0.09
A2015	Tiglyl carnitine (C5:1)	0.00	0.02	0.01	0.03
A2015	Glutarylcarnitine (C5DC)	0.00	0.02	0.00	0.03
A2015	Hydroxyisovalerylcarnitine (C5OH)	0.00	0.42	0.35	0.48
A2015	Hexanoylcarnitine (C6)	0.00	0.01	0.00	0.02
A2015	Octanoylcarnitine (C8)	0.00	0.02	0.01	0.03
A2015	Decanoylcarnitine (C10)	0.00	0.02	0.00	0.08
A2015	Dodecanoylcarnitine (C12)	0.00	0.02	0.01	0.03
A2015	Myristoylcarnitine (C14)	0.00	0.06	0.05	0.07
A2015	Tetradecenoyl carnitine (C14:1)	0.00	0.02	0.01	0.03
A2015	Palmitoylcarnitine (C16)	0.00	0.85	0.74	0.97

Lot	Analyte	Enrichment	Mean Value	95% LL	95% UL
A2015	Hydroxypalmitoylcarnitine (C16OH)	0.00	0.01	0.01	0.02
A2015	Stearoylcarnitine (C18)	0.00	0.62	0.53	0.70
A2015	Hydroxystearoylcarnitine (C18OH)	0.00	0.01	0.00	0.02
B2015	Alanine (Ala)	200.0	511.5	447.7	575.4
B2015	Arginine (Arg)	100.0	91.4	73.4	109.3
B2015	Citrulline (Cit)	25.0	37.6	31.4	43.8
B2015	Glycine (Gly)	300.0	677.7	588.9	766.4
B2015	Leucine (Leu)	150.0	203.7	182.4	225.0
B2015	Methionine (Met)	50.0	56.1	50.0	62.3
B2015	Ornithine (Orn)	100.0	229.3	179.1	279.5
B2015	Phenylalanine (Phe)	150.0	185.0	161.7	208.3
B2015	Creatine (CRE)	50.0	267.9	233.0	302.9
B2015	Guanidinoacetic Acid (GUAC)	5.0	6.0	5.1	7.0
B2015	Creatinine (CRN)	50.0	92.3	77.9	106.8
B2015	Succinylacetone (SUAC)	2.50	2.06	1.51	2.61
B2015	Tyrosine (Tyr)	300.0	293.2	254.4	332.1
B2015	Valine (Val)	200.0	235.4	209.8	261.0
B2015	Free carnitine (C0)	10.00	31.96	26.66	37.26
B2015	Acetylcarnitine (C2)	10.00	20.79	18.03	23.55
B2015	Propionylcarnitine (C3)	4.00	5.10	4.50	5.70
B2015	Malonylcarnitine (C3DC)	0.50	0.44	0.34	0.54
B2015	Butyrylcarnitine (C4)	1.00	0.77	0.68	0.87
B2015	Hydroxybutyrylcarnitine (C4OH)	0.50	0.44	0.38	0.50
B2015	Isovaleryl carnitine (C5)	0.50	0.50	0.45	0.55
B2015	Tiglyl carnitine (C5:1)	0.50	0.40	0.35	0.46
B2015	Glutaryl carnitine (C5DC)	0.50	0.50	0.43	0.58
B2015	Hydroxyisovaleryl carnitine (C5OH)	1.00	1.22	1.06	1.37
B2015	Hexanoylcarnitine (C6)	0.50	0.38	0.34	0.42
B2015	Octanoylcarnitine (C8)	0.50	0.45	0.39	0.51
B2015	Decanoylcarnitine (C10)	0.50	0.45	0.36	0.54
B2015	Dodecanoylcarnitine (C12)	1.00	0.83	0.74	0.93
B2015	Myristoylcarnitine (C14)	0.50	0.48	0.41	0.55
B2015	Tetradecenoyl carnitine (C14:1)	0.50	0.29	0.24	0.34
B2015	Palmitoylcarnitine (C16)	4.00	4.35	3.85	4.85
B2015	Hydroxypalmitoylcarnitine (C16OH)	0.25	0.24	0.20	0.28
B2015	Stearoylcarnitine (C18)	1.00	1.57	1.38	1.77
B2015	Hydroxystearoylcarnitine (C18OH)	0.25	0.17	0.13	0.20
C2015	Alanine (Ala)	400.0	685.9	584.8	786.9
C2015	Arginine (Arg)	200.0	174.7	137.6	211.8
C2015	Citrulline (Cit)	100.0	104.6	87.1	122.0

Lot	Analyte	Enrichment	Mean Value	95% LL	95% UL
C2015	Glycine (Gly)	600.0	982.7	853.6	1111.7
C2015	Leucine (Leu)	300.0	327.9	287.9	367.8
C2015	Methionine (Met)	150.0	144.7	128.8	160.6
C2015	Ornithine (Orn)	200.0	302.9	228.7	377.1
C2015	Phenylalanine (Phe)	300.0	327.3	278.1	376.4
C2015	Creatine (CRE)	200.0	393.8	341.3	446.3
C2015	Guanidinoacetic Acid (GUAC)	10.0	10.9	8.8	13.0
C2015	Creatinine (CRN)	100.0	156.2	130.6	181.8
C2015	Succinylacetone (SUAC)	10.00	5.23	4.16	6.29
C2015	Tyrosine (Tyr)	600.0	565.5	480.3	650.7
C2015	Valine (Val)	350.0	350.4	310.0	390.8
C2015	Free carnitine (C0)	20.00	50.58	41.63	59.53
C2015	Acetylcarnitine (C2)	20.00	30.99	27.13	34.85
C2015	Propionylcarnitine (C3)	8.00	9.30	8.10	10.50
C2015	Malonylcarnitine (C3DC)	1.50	1.28	1.02	1.54
C2015	Butyrylcarnitine (C4)	3.00	2.15	1.86	2.43
C2015	Hydroxybutyrylcarnitine (C4OH)	1.00	0.84	0.73	0.94
C2015	Isovalerylcarnitine (C5)	1.50	1.37	1.21	1.53
C2015	Tiglyl carnitine (C5:1)	1.50	1.16	1.01	1.31
C2015	Glutaryl carnitine (C5DC)	1.00	0.98	0.84	1.11
C2015	Hydroxyisovalerylcarnitine (C5OH)	2.00	2.07	1.81	2.33
C2015	Hexanoylcarnitine (C6)	1.00	0.77	0.67	0.88
C2015	Octanoylcarnitine (C8)	1.00	0.88	0.75	1.01
C2015	Decanoylcarnitine (C10)	1.00	0.92	0.78	1.06
C2015	Dodecanoylcarnitine (C12)	2.00	1.63	1.39	1.88
C2015	Myristoylcarnitine (C14)	1.50	1.36	1.16	1.56
C2015	Tetradecenoyl carnitine (C14:1)	1.50	0.82	0.67	0.96
C2015	Palmitoylcarnitine (C16)	8.00	7.83	6.85	8.81
C2015	Hydroxypalmitoylcarnitine (C16OH)	1.00	0.93	0.81	1.06
C2015	Stearoylcarnitine (C18)	3.00	3.30	2.89	3.71
C2015	Hydroxystearoylcarnitine (C18OH)	1.00	0.63	0.52	0.73
D2015	Alanine (Ala)	600.0	842.5	720.8	964.2
D2015	Arginine (Arg)	300.0	259.4	212.3	306.4
D2015	Citrulline (Cit)	250.0	243.8	206.4	281.2
D2015	Glycine (Gly)	900.0	1312.4	1089.8	1535.1
D2015	Leucine (Leu)	600.0	571.7	496.3	647.1
D2015	Methionine (Met)	250.0	228.4	200.0	256.9
D2015	Ornithine (Orn)	300.0	376.6	304.6	448.7
D2015	Phenylalanine (Phe)	450.0	476.2	409.9	542.5
D2015	Creatine (CRE)	400.0	556.2	475.6	636.8
D2015	Guanidinoacetic Acid (GUAC)	20.0	20.2	16.8	23.7
D2015	Creatinine (CRN)	200.0	270.4	222.5	318.2

Lot	Analyte	Enrichment	Mean Value	95% LL	95% UL
D2015	Succinylacetone (SUAC)	20.00	9.44	7.47	11.41
D2015	Tyrosine (Tyr)	900.0	829.8	719.0	940.6
D2015	Valine (Val)	500.0	460.5	399.5	521.4
D2015	Free carnitine (C0)	30.00	65.58	55.98	75.19
D2015	Acetylcarnitine (C2)	30.00	40.30	34.55	46.04
D2015	Propionylcarnitine (C3)	12.00	13.30	11.20	15.30
D2015	Malonylcarnitine (C3DC)	3.00	2.50	2.11	2.89
D2015	Butyrylcarnitine (C4)	5.00	3.54	3.06	4.03
D2015	Hydroxybutyrylcarnitine (C4OH)	2.50	1.93	1.68	2.19
D2015	Isovalerylcarnitine (C5)	3.00	2.70	2.33	3.07
D2015	Tiglyl carnitine (C5:1)	3.00	2.30	2.00	2.61
D2015	Glutaryl carnitine (C5DC)	2.50	2.44	2.10	2.77
D2015	Hydroxyisovalerylcarnitine (C5OH)	3.00	2.85	2.47	3.23
D2015	Hexanoylcarnitine (C6)	2.50	1.96	1.64	2.28
D2015	Octanoylcarnitine (C8)	2.50	2.16	1.83	2.49
D2015	Decanoylcarnitine (C10)	2.50	2.36	1.96	2.75
D2015	Dodecanoylcarnitine (C12)	3.00	2.46	2.02	2.90
D2015	Myristoylcarnitine (C14)	3.00	2.72	2.20	3.24
D2015	Tetradecenoyl carnitine (C14:1)	3.00	1.66	1.33	1.99
D2015	Palmitoylcarnitine (C16)	12.00	11.36	9.38	13.34
D2015	Hydroxypalmitoylcarnitine (C16OH)	1.50	1.42	1.19	1.65
D2015	Stearoylcarnitine (C18)	5.00	5.38	4.40	6.36
D2015	Hydroxystearoylcarnitine (C18OH)	1.50	0.97	0.79	1.15