

Fatty Acids in Frozen Human Serum

Art. ID	NIST-2378
Unit	3 vials x 1 mL
Deliverydetails	Dry ice shipment /not restricted

Description

This Standard Reference Material (SRM) is intended primarily for validation of methods for determining fatty acids in human serum and similar materials. A unit of SRM 2378 consists of three vials, each containing approximately 1.0 mL of frozen serum with different concentrations of fatty acids (Serum 1, Serum 2, and Serum 3). /// Sample value(s) - please ask for current certificate.

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
Certified value, Serum 1	Tetradecanoic acid (Myristic acid) (C14:0)	[544-63-8]	44.6 ± 1.5	µg/g		
Certified value, Serum 1	Hexadecanoic acid (Palmitic acid) (C16:0)	[57-10-3]	833 ± 87	µg/g		
Certified value, Serum 1	(Z)-9-Hexadecenoic acid (Palmitoleic acid) (C16:1 n-7)	[373-49-9]	53.4 ± 3.8	µg/g		
Certified value, Serum 1	Octadecanoic acid (Stearic acid) (C18:0)	[57-11-4]	221 ± 25	µg/g		
Certified value, Serum 1	(Z)-9-Octadecenoic acid (Oleic acid) (C18:1 n-9)	[112-80-1]	604 ± 66	µg/g		
Certified value, Serum 1	(Z,Z)-9,12-Octadecadienoic acid (Linoleic acid) (C18:2 n-6)	[60-33-3]	1030 ± 180	µg/g		
Certified value, Serum 1	(Z,Z,Z)-9,12,15-Octadecatrienoic acid (alpha-Linolenic acid) (C18:3 n-3)	[463-40-1]	32.5 ± 4.1	µg/g		
Certified value, Serum 1	(Z,Z,Z)-6,9,12-Octadecatrienoic acid (gamma-Linolenic acid) (C18:3 n-6)	[506-26-3]	12.3 ± 1.6	µg/g		
Certified value, Serum 1	(Z,Z,Z,Z)-5,8,11,14-Eicosatetraenoic acid (Arachidonic acid) (C20:4 n-6)	[506-32-1]	196 ± 20	µg/g		

Certified value, Serum 1	omega-3 (Z,Z,Z,Z,Z)-5,8, 11,14,17-Eicosapentaen oic acid (EPA) (C20:5 n-3)	[10417-94-4]	84 ± 11	µg/g
Certified value, Serum 1	(Z,Z,Z,Z,Z,-)-7,10,13,16, 19-Docosapentaenoic ac id (DPA) (C22:5 n-3)	[24880-45-3]	22.4 ± 1.2	µg/g
Certified value, Serum 1	omega-3 (Z,Z,Z,Z,Z,Z)-4, 7,10,13,16,19-Docosahe xaenoic acid (DHA) (C22 :6 n-3)	[6217-54-5]	104 ± 5	µg/g
Certified value, Serum 1	Tetradecanoic acid (Myr istic acid) (C14:0)	[544-63-8]	200 ± 7	µmol/L
Certified value, Serum 1	Hexadecanoic acid (Palm itic acid) (C16:0)	[57-10-3]	3320 ± 350	µmol/L
Certified value, Serum 1	(Z)-9-Hexadecenoic acid (Palmitoleic acid) (C1 6:1 n-7)	[373-49-9]	214 ± 15	µmol/L
Certified value, Serum 1	Octadecanoic acid (Stea ric acid) (C18:0)	[57-11-4]	795 ± 90	µmol/L
Certified value, Serum 1	(Z)-9-Octadecenoic acid (Oleic acid) (C18:1 n- 9)	[112-80-1]	2190 ± 240	µmol/L
Certified value, Serum 1	(Z,Z)-9,12-Octadecadien oic acid (Linoleic acid) (C18:2 n-6)	[60-33-3]	3740 ± 640	µmol/L
Certified value, Serum 1	(Z,Z,Z)-9,12,15-Octadec atrienoic acid (alpha-L inolenic acid) (C18:3 n- -3)	[463-40-1]	119 ± 15	µmol/L
Certified value, Serum 1	(Z,Z,Z)-6,9,12-Octadeca trienoic acid (gamma-Li nolenic acid) (C18:3 n- 6)	[506-26-3]	45,1 ± 6,0	µmol/L
Certified value, Serum 1	(Z,Z,Z,Z)-5,8,11,14-Eic osatetraenoic acid (Ara chidonic acid) (C20:4 n- -6)	[506-32-1]	659 ± 69	µmol/L

Certified value, Serum 1	omega-3 (Z,Z,Z,Z,Z)-5,8, 11,14,17-Eicosapentaen oic acid (EPA) (C20:5 n- 3)	[10417-94-4]	284 ± 37	µmol/L
Certified value, Serum 1	(Z,Z,Z,Z,Z,-)-7,10,13,16, 19-Docosapentaenoic ac id (DPA) (C22:5 n-3)	[24880-45-3]	69,4 ± 3,6	µmol/L
Certified value, Serum 1	omega-3 (Z,Z,Z,Z,Z,Z)-4, 7,10,13,16,19-Docosahe xaenoic acid (DHA) (C22 :6 n-3)	[6217-54-5]	323 ± 16	µmol/L
Certified value, Serum 2	Tetradecanoic acid (Myr istic acid) (C14:0)	[544-63-8]	33,8 ± 1,2	µg/g
Certified value, Serum 2	Hexadecanoic acid (Palm itic acid) (C16:0)	[57-10-3]	715 ± 111	µg/g
Certified value, Serum 2	(Z)-9-Hexadecenoic acid (Palmitoleic acid) (C1 6:1 n-7)	[373-49-9]	69,1 ± 6,9	µg/g
Certified value, Serum 2	Octadecanoic acid (Stea ric acid) (C18:0)	[57-11-4]	231 ± 14	µg/g
Certified value, Serum 2	(Z)-9-Octadecenoic acid (Oleic acid) (C18:1 n- 9)	[112-80-1]	738 ± 52	µg/g
Certified value, Serum 2	(Z,Z)-9,12-Octadecadien oic acid (Linoleic acid) (C18:2 n-6)	[60-33-3]	1220 ± 10	µg/g
Certified value, Serum 2	(Z,Z,Z)-9,12,15-Octadec atrienoic acid (alpha-L inolenic acid) (C18:3 n- 3)	[463-40-1]	31,5 ± 1,3	µg/g
Certified value, Serum 2	(Z,Z,Z)-6,9,12-Octadeca trienoic acid (gamma-Li nolenic acid) (C18:3 n- 6)	[506-26-3]	21,0 ± 0,4	µg/g
Certified value, Serum 2	(Z,Z,Z,Z)-5,8,11,14-Eic osatetraenoic acid (Ara chidonic acid) (C20:4 n- 6)	[506-32-1]	235 ± 26	µg/g

Certified value, Serum 2	omega-3 (Z,Z,Z,Z,Z)-5,8, 11,14,17-Eicosapentaen oic acid (EPA) (C20:5 n-3)	[10417-94-4]	20,7 ± 0,8	µg/g
Certified value, Serum 2	(Z,Z,Z,Z,Z,-)-7,10,13,16, 19-Docosapentaenoic ac id (DPA) (C22:5 n-3)	[24880-45-3]	17,0 ± 0,8	µg/g
Certified value, Serum 2	omega-3 (Z,Z,Z,Z,Z,Z)-4, 7,10,13,16,19-Docosahe xaenoic acid (DHA) (C22 :6 n-3)	[6217-54-5]	55,4 ± 2,3	µg/g
Certified value, Serum 2	Tetradecanoic acid (Myr istic acid) (C14:0)	[544-63-8]	151 ± 5	µmol/L
Certified value, Serum 2	Hexadecanoic acid (Palm itic acid) (C16:0)	[57-10-3]	2850 ± 440	µmol/L
Certified value, Serum 2	(Z)-9-Hexadecenoic acid (Palmitoleic acid) (C16:1 n-7)	[373-49-9]	278 ± 28	µmol/L
Certified value, Serum 2	Octadecanoic acid (Stearic acid) (C18:0)	[57-11-4]	830 ± 50	µmol/L
Certified value, Serum 2	(Z)-9-Octadecenoic acid (Oleic acid) (C18:1 n-9)	[112-80-1]	2670 ± 189	µmol/L
Certified value, Serum 2	(Z,Z)-9,12-Octadecadien oic acid (Linoleic acid)) (C18:2 n-6)	[60-33-3]	4460 ± 45	µmol/L
Certified value, Serum 2	(Z,Z,Z)-9,12,15-Octadec atrienoic acid (alpha-Li nolenic acid) (C18:3 n-3)	[463-40-1]	116 ± 5	µmol/L
Certified value, Serum 2	(Z,Z,Z)-6,9,12-Octadeca trienoic acid (gamma-Li nolenic acid) (C18:3 n-6)	[506-26-3]	77,1 ± 1,4	µmol/L
Certified value, Serum 2	(Z,Z,Z,Z)-5,8,11,14-Eic osatetraenoic acid (Ara chidonic acid) (C20:4 n-6)	[506-32-1]	790 ± 86	µmol/L

Certified value, Serum 2	omega-3 (Z,Z,Z,Z,Z)-5,8, 11,14,17-Eicosapentaen oic acid (EPA) (C20:5 n- 3)	[10417-94-4]	70,1 ± 2,6	µmol/L
Certified value, Serum 2	(Z,Z,Z,Z,Z,-)-7,10,13,16, 19-Docosapentaenoic ac id (DPA) (C22:5 n-3)	[24880-45-3]	52,6 ± 2,4	µmol/L
Certified value, Serum 2	omega-3 (Z,Z,Z,Z,Z,Z)-4, 7,10,13,16,19-Docosahe xaenoic acid (DHA) (C22 :6 n-3)	[6217-54-5]	173 ± 7	µmol/L
Certified value, Serum 3	Tetradecanoic acid (Myr istic acid) (C14:0)	[544-63-8]	34,6 ± 0,8	µg/g
Certified value, Serum 3	Hexadecanoic acid (Palm itic acid) (C16:0)	[57-10-3]	642 ± 114	µg/g
Certified value, Serum 3	(Z)-9-Hexadecenoic acid (Palmitoleic acid) (C1 6:1 n-7)	[373-49-9]	45,7 ± 3,2	µg/g
Certified value, Serum 3	Octadecanoic acid (Stea ric acid) (C18:0)	[57-11-4]	194 ± 21	µg/g
Certified value, Serum 3	(Z)-9-Octadecenoic acid (Oleic acid) (C18:1 n- 9)	[112-80-1]	569 ± 66	µg/g
Certified value, Serum 3	(Z,Z)-9,12-Octadecadien oic acid (Linoleic acid) (C18:2 n-6)	[60-33-3]	913 ± 6	µg/g
Certified value, Serum 3	(Z,Z,Z)-9,12,15-Octadec atrienoic acid (alpha-L inolenic acid) (C18:3 n- 3)	[463-40-1]	17,0 ± 0,1	µg/g
Certified value, Serum 3	(Z,Z,Z)-6,9,12-Octadeca trienoic acid (gamma-Li nolenic acid) (C18:3 n- 6)	[506-26-3]	14,6 ± 1,0	µg/g
Certified value, Serum 3	(Z,Z,Z,Z)-5,8,11,14-Eic osatetraenoic acid (Ara chidonic acid) (C20:4 n- 6)	[506-32-1]	228 ± 14	µg/g

Certified value, Serum 3	omega-3 (Z,Z,Z,Z,Z)-5,8, 11,14,17-Eicosapentaen oic acid (EPA) (C20:5 n-3)	[10417-94-4]	18,9 ± 2,2	µg/g
Certified value, Serum 3	(Z,Z,Z,Z,Z,-)-7,10,13,16, 19-Docosapentaenoic ac id (DPA) (C22:5 n-3)	[24880-45-3]	11,4 ± 0,6	µg/g
Certified value, Serum 3	omega-3 (Z,Z,Z,Z,Z,Z)-4, 7,10,13,16,19-Docosahe xaenoic acid (DHA) (C22 :6 n-3)	[6217-54-5]	54,9 ± 2,4	µg/g
Certified value, Serum 3	Tetradecanoic acid (Myr istic acid) (C14:0)	[544-63-8]	155 ± 4	µmol/L
Certified value, Serum 3	Hexadecanoic acid (Palm itic acid) (C16:0)	[57-10-3]	2560 ± 460	µmol/L
Certified value, Serum 3	(Z)-9-Hexadecenoic acid (Palmitoleic acid) (C1 6:1 n-7)	[373-49-9]	184 ± 13	µmol/L
Certified value, Serum 3	Octadecanoic acid (Stea ric acid) (C18:0)	[57-11-4]	696 ± 75	µmol/L
Certified value, Serum 3	(Z)-9-Octadecenoic acid (Oleic acid) (C18:1 n- 9)	[112-80-1]	2060 ± 240	µmol/L
Certified value, Serum 3	(Z,Z)-9,12-Octadecadien oic acid (Linoleic acid) (C18:2 n-6)	[60-33-3]	3330 ± 20	µmol/L
Certified value, Serum 3	(Z,Z,Z)-9,12,15-Octadec atrienoic acid (alpha-L inolenic acid) (C18:3 n- -3)	[463-40-1]	62,4 ± 0,5	µmol/L
Certified value, Serum 3	(Z,Z,Z)-6,9,12-Octadeca trienoic acid (gamma-Li nolenic acid) (C18:3 n- 6)	[506-26-3]	53,6 ± 3,6	µmol/L
Certified value, Serum 3	(Z,Z,Z,Z)-5,8,11,14-Eic osatetraenoic acid (Ara chidonic acid) (C20:4 n- -6)	[506-32-1]	765 ± 46	µmol/L

Certified value, Serum 3	omega-3 (Z,Z,Z,Z,Z)-5,8 ,11,14,17-Eicosapentaen oic acid (EPA) (C20:5 n -3)	[10417-94-4]	63,8 ± 7,6	µmol/L
Certified value, Serum 3	(Z,Z,Z,Z,Z,-)-7,10,13,16 ,19-Docosapentaenoic ac id (DPA) (C22:5 n-3)	[24880-45-3]	35,1 ± 1,9	µmol/L
Certified value, Serum 3	omega-3 (Z,Z,Z,Z,Z,Z)-4 ,7,10,13,16,19-Docosahe xaenoic acid (DHA) (C22 :6 n-3)	[6217-54-5]	171 ± 8	µmol/L
Reference value, Serum 1	Decanoic acid (Capric a cid) (C10:0)	[334-48-5]	3,56 ± 0,04	µg/g
Reference value, Serum 1	(Z)-9-Tetradecenoic aci d (Myristoleic acid) (C14:1)	[544-64-9]	3,4 ± 1,5	µg/g
Reference value, Serum 1	Pentadecanoic acid (C15 :0)	[1002-84-2]	5,14 ± 0,16	µg/g
Reference value, Serum 1	Heptadecanoic acid (Mar garic acid) (C17:0)	[506-12-7]	7,11 ± 0,47	µg/g
Reference value, Serum 1	(Z)-11-Octadecenoic aci d (Vaccenic acid) (C18: 1 n-7)	[506-17-2]	41,3 ± 7,4	µg/g
Reference value, Serum 1	(Z,Z,Z,Z,Z)-6,9,12,15-Oct adecatetraenoic acid (S tearidonic acid) (C18:4 n-3)	[20290-75-9]	2,20 ± 0,31	µg/g
Reference value, Serum 1	Eicosanoic acid (Arachi dic acid) (C20:0)	[506-30-9]	7,6 ± 1,1	µg/g
Reference value, Serum 1	(Z)-11-Eicosenoic acid (Gondoic acid) (C20:1 n -9)	[5561-99-9]	6,0 ± 1,0	µg/g
Reference value, Serum 1	(Z,Z,Z)-5,8,11-Eicosatr ienoic acid (C20:3 n-9)		1,40 ± 0,09	µg/g
Reference value, Serum 1	Docosanoic acid (Beheni c acid) (C22:0)	[112-85-6]	18,8 ± 4,3	µg/g
Reference value, Serum 1	(Z)-13-Docosenoic acid (Erucic acid) (C22:1 n-	[112-86-7]	1,7 ± 1,0	µg/g

	9)				
Reference value, Serum	(Z,Z)-13,16-Docosadienoic acid (C22:2 n-6)		0,31 ± 0,02		µg/g
1					
Reference value, Serum	(Z,Z,Z,Z,Z)-4,7,10,13,16-Docosapentaenoic acid (C22:5 n-6)		2,71 ± 0,21		µg/g
1					
Reference value, Serum	Tricosanoic acid (C23:0)	[2433-96-7]	8,19 ± 0,19		µg/g
1)				
Reference value, Serum	Tetracosanoic acid (Lignoceric acid) (C24:0)	[557-59-5]	19 ± 5		µg/g
1					
Reference value, Serum	(Z)-15-Tetracosenoic acid (Nervonic Acid) (C24:1 n-9)	[506-37-6]	32 ± 9		µg/g
1					
Reference value, Serum	Hexacosanoic acid (Ceric acid) (C26:0)	[506-46-7]	0,35 ± 0,05		µg/g
1					
Reference value, Serum	(7R,11R)-3,7,11,15-Tetramethyl-hexadecanoic acid (Phytanic acid)	[14721-66-5]	0,55 ± 0,02		µg/g
1					
Reference value, Serum	Decanoic acid (Capric acid) (C10:0)	[334-48-5]	21,1 ± 0,2		µmol/L
1					
Reference value, Serum	(Z)-9-Tetradecenoic acid (Myristoleic acid) (C14:1)	[544-64-9]	16 ± 7		µmol/L
1					
Reference value, Serum	Pentadecanoic acid (C15:0)	[1002-84-2]	21,7 ± 0,7		µmol/L
1					
Reference value, Serum	Heptadecanoic acid (Margaric acid) (C17:0)	[506-12-7]	26,9 ± 1,8		µmol/L
1					
Reference value, Serum	(Z)-11-Octadecenoic acid (Vaccenic acid) (C18:1 n-7)	[506-17-2]	149 ± 27		µmol/L
1					
Reference value, Serum	(Z,Z,Z,Z)-6,9,12,15-Octadecatetraenoic acid (Stearidonic acid) (C18:4 n-3)	[20290-75-9]	8,1 ± 1,1		µmol/L
1					
Reference value, Serum	Eicosanoic acid (Arachidic acid) (C20:0)	[506-30-9]	25,0 ± 3,6		µmol/L
1					
Reference value, Serum	(Z)-11-Eicosenoic acid (Gondoic acid) (C20:1 n-7)	[5561-99-9]	19,7 ± 3,3		µmol/L
1					

	-9)			
Reference value, Serum	(Z,Z,Z)-5,8,11-Eicosatrienoic acid (C20:3 n-9)		4,67 ± 0,29	µmol/L
1				
Reference value, Serum	Docosanoic acid (Behenic acid) (C22:0)	[112-85-6]	57 ± 13	µmol/L
1				
Reference value, Serum	(Z)-13-Docosenoic acid (Erucic acid) (C22:1 n-9)	[112-86-7]	5 ± 3	µmol/L
1				
Reference value, Serum	(Z,Z)-13,16-Docosadienoic acid (C22:2 n-6)		0,93 ± 0,06	µmol/L
1				
Reference value, Serum	(Z,Z,Z,Z,Z)-4,7,10,13,16-Docosapentaenoic acid (C22:5 n-6)		8,37 ± 0,64	µmol/L
1				
Reference value, Serum	Tricosanoic acid (C23:0)	[2433-96-7]	23,6 ± 0,5	µmol/L
1				
Reference value, Serum	Tetracosanoic acid (Lignoceric acid) (C24:0)	[557-59-5]	54 ± 13	µmol/L
1				
Reference value, Serum	(Z)-15-Tetracosenoic acid (Nervonic Acid) (C24:1 n-9)	[506-37-6]	89 ± 26	µmol/L
1				
Reference value, Serum	Hexacosanoic acid (Cerotic acid) (C26:0)	[506-46-7]	0,89 ± 0,12	µmol/L
1				
Reference value, Serum	(7R,11R)-3,7,11,15-Tetramethyl-hexadecanoic acid (Phytanic acid)	[14721-66-5]	1,80 ± 0,06	µmol/L
1				
Reference value, Serum	Decanoic acid (Capric acid) (C10:0)	[334-48-5]	0,3 ± 0,1	µg/g
2				
Reference value, Serum	(Z)-9-Tetradecenoic acid (Myristoleic acid) (C14:1)	[544-64-9]	2,8 ± 1,5	µg/g
2				
Reference value, Serum	Pentadecanoic acid (C15:0)	[1002-84-2]	6,76 ± 0,16	µg/g
2				
Reference value, Serum	Heptadecanoic acid (Margaric acid) (C17:0)	[506-12-7]	8,84 ± 0,21	µg/g
2				
Reference value, Serum	(Z)-11-Octadecenoic acid (Vaccenic acid) (C18:1 n-7)	[506-17-2]	35,6 ± 6,0	µg/g
2				
Reference value, Serum	(Z,Z,Z,Z)-6,9,12,15-Octadecatetraenoic acid (C18:4 n-7)	[20290-75-9]	1,11 ± 0,15	µg/g

2	adecatetraenoic acid (S tearidonic acid) (C18:4 n-3)				
Reference value, Serum 2	Eicosanoic acid (Arachi dic acid) (C20:0)	[506-30-9]	8,7 ± 1,5		µg/g
Reference value, Serum 2	(Z)-11-Eicosenoic acid (Gondoic acid) (C20:1 n -9)	[5561-99-9]	5,7 ± 1,0		µg/g
Reference value, Serum 2	(Z,Z,Z)-5,8,11-Eicosatr ienoic acid (C20:3 n-9)		2,13 ± 0,07		µg/g
Reference value, Serum 2	Docosanoic acid (Beheni c acid) (C22:0)	[112-85-6]	29 ± 9		µg/g
Reference value, Serum 2	(Z)-13-Docosenoic acid (Erucic acid) (C22:1 n- 9)	[112-86-7]	1,7 ± 0,9		µg/g
Reference value, Serum 2	(Z,Z)-13,16-Docosadieno ic acid (C22:2 n-6)		0,36 ± 0,03		µg/g
Reference value, Serum 2	(Z,Z,Z,Z,Z)-4,7,10,13,1 6-Docosapentaenoic acid (C22:5 n-6)		5,20 ± 0,41		µg/g
Reference value, Serum 2	Tricosanoic acid (C23:0)	[2433-96-7]	13,1 ± 0,5		µg/g
Reference value, Serum 2	Tetracosanoic acid (Lig noceric acid) (C24:0)	[557-59-5]	25 ± 9		µg/g
Reference value, Serum 2	(Z)-15-Tetracosenoic ac id (Nervonic Acid) (C24 :1 n-9)	[506-37-6]	30 ± 17		µg/g
Reference value, Serum 2	Hexacosanoic acid (Cero tic acid) (C26:0)	[506-46-7]	0,25 ± 0,04		µg/g
Reference value, Serum 2	(7R,11R)-3,7,11,15-Tetr amethyl-hexadecanoic ac id (Phytanic acid)	[14721-66-5]	0,33 ± 0,02		µg/g
Reference value, Serum 2	Decanoic acid (Capric a cid) (C10:0)	[334-48-5]	1,9 ± 0,8		µmol/L
Reference value, Serum 2	(Z)-9-Tetradecenoic aci d (Myristoleic acid) (C14:1)	[544-64-9]	13 ± 7		µmol/L
Reference value, Serum	Pentadecanoic acid (C15	[1002-84-2]	28,5 ± 0,7		µmol/L

2	:0)				
Reference value, Serum	Heptadecanoic acid (Margaric acid) (C17:0)	[506-12-7]	33,4 ± 0,8		µmol/L
2					
Reference value, Serum	(Z)-11-Octadecenoic acid (Vaccenic acid) (C18:1 n-7)	[506-17-2]	129 ± 22		µmol/L
2					
Reference value, Serum	(Z,Z,Z,Z)-6,9,12,15-Octadecatetraenoic acid (Stearidonic acid) (C18:4 n-3)	[20290-75-9]	4,11 ± 0,54		µmol/L
2					
Reference value, Serum	Eicosanoic acid (Arachidic acid) (C20:0)	[506-30-9]	28,4 ± 4,8		µmol/L
2					
Reference value, Serum	(Z)-11-Eicosenoic acid (Gondoic acid) (C20:1 n-9)	[5561-99-9]	18,9 ± 3,4		µmol/L
2					
Reference value, Serum	(Z,Z,Z)-5,8,11-Eicosatrienoic acid (C20:3 n-9)		7,10 ± 0,23		µmol/L
2					
Reference value, Serum	Docosanoic acid (Behenic acid) (C22:0)	[112-85-6]	86 ± 27		µmol/L
2					
Reference value, Serum	(Z)-13-Docosenoic acid (Erucic acid) (C22:1 n-9)	[112-86-7]	5 ± 3		µmol/L
2					
Reference value, Serum	(Z,Z)-13,16-Docosadienoic acid (C22:2 n-6)		1,09 ± 0,09		µmol/L
2					
Reference value, Serum	(Z,Z,Z,Z,Z)-4,7,10,13,16-Docosapentaenoic acid (C22:5 n-6)		16,1 ± 1,3		µmol/L
2					
Reference value, Serum	Tricosanoic acid (C23:0)	[2433-96-7]	37,9 ± 1,5		µmol/L
2					
Reference value, Serum	Tetracosanoic acid (Lignoceric acid) (C24:0)	[557-59-5]	70 ± 25		µmol/L
2					
Reference value, Serum	(Z)-15-Tetracosenoic acid (Nervonic Acid) (C24:1 n-9)	[506-37-6]	83 ± 49		µmol/L
2					
Reference value, Serum	Hexacosanoic acid (Cerotic acid) (C26:0)	[506-46-7]	0,63 ± 0,11		µmol/L
2					
Reference value, Serum	(7R,11R)-3,7,11,15-Tetramethyl-hexadecanoic acid	[14721-66-5]	1,07 ± 0,06		µmol/L
2					

id (Phytanic acid)				
Reference value, Serum 3	Decanoic acid (Capric acid) (C10:0)	[334-48-5]	0,89 ± 0,15	µg/g
Reference value, Serum 3	(Z)-9-Tetradecenoic acid (Myristoleic acid) (C14:1)	[544-64-9]	3,2 ± 1,7	µg/g
Reference value, Serum 3	Pentadecanoic acid (C15:0)	[1002-84-2]	4,92 ± 0,12	µg/g
Reference value, Serum 3	Heptadecanoic acid (Margaric acid) (C17:0)	[506-12-7]	7,02 ± 0,37	µg/g
Reference value, Serum 3	(Z)-11-Octadecenoic acid (Vaccenic acid) (C18:1 n-7)	[506-17-2]	32,0 ± 3,3	µg/g
Reference value, Serum 3	(Z,Z,Z,Z)-6,9,12,15-Octadecatetraenoic acid (Stearidonic acid) (C18:4 n-3)	[20290-75-9]	0,77 ± 0,05	µg/g
Reference value, Serum 3	Eicosanoic acid (Arachidic acid) (C20:0)	[506-30-9]	7,9 ± 2,7	µg/g
Reference value, Serum 3	(Z)-11-Eicosenoic acid (Gondoic acid) (C20:1 n-9)	[5561-99-9]	5,88 ± 0,43	µg/g
Reference value, Serum 3	(Z,Z,Z)-5,8,11-Eicosatrienoic acid (C20:3 n-9)		2,26 ± 0,03	µg/g
Reference value, Serum 3	Docosanoic acid (Behenic acid) (C22:0)	[112-85-6]	19,2 ± 4,5	µg/g
Reference value, Serum 3	(Z)-13-Docosenoic acid (Erucic acid) (C22:1 n-9)	[112-86-7]	1,9 ± 1,3	µg/g
Reference value, Serum 3	(Z,Z)-13,16-Docosadienoic acid (C22:2 n-6)		0,303 ± 0,003	µg/g
Reference value, Serum 3	(Z,Z,Z,Z,Z)-4,7,10,13,16-Docosapentaenoic acid (C22:5 n-6)		5,16 ± 0,42	µg/g
Reference value, Serum 3	Tricosanoic acid (C23:0)	[2433-96-7]	7,75 ± 0,07	µg/g
Reference value, Serum 3	Tetracosanoic acid (Lignoceric acid) (C24:0)	[557-59-5]	18 ± 6	µg/g

Reference value, Serum 3	(Z)-15-Tetracosenoic acid (Nervonic Acid) (C24:1 n-9)	[506-37-6]	22 ± 9	µg/g
Reference value, Serum 3	Hexacosanoic acid (Ceric acid) (C26:0)	[506-46-7]	0,34 ± 0,09	µg/g
Reference value, Serum 3	(7R,11R)-3,7,11,15-Tetramethyl-hexadecanoic acid (Phytanic acid)	[14721-66-5]	0,48 ± 0,06	µg/g
Reference value, Serum 3	Decanoic acid (Capric acid) (C10:0)	[334-48-5]	5,3 ± 0,9	µmol/L
Reference value, Serum 3	(Z)-9-Tetradecenoic acid (Myristoleic acid) (C14:1)	[544-64-9]	14 ± 8	µmol/L
Reference value, Serum 3	Pentadecanoic acid (C15:0)	[1002-84-2]	20,7 ± 0,5	µmol/L
Reference value, Serum 3	Heptadecanoic acid (Margaric acid) (C17:0)	[506-12-7]	26,5 ± 1,4	µmol/L
Reference value, Serum 3	(Z)-11-Octadecenoic acid (Vaccenic acid) (C18:1 n-7)	[506-17-2]	116 ± 12	µmol/L
Reference value, Serum 3	(Z,Z,Z,Z)-6,9,12,15-Octadecatetraenoic acid (Stearidonic acid) (C18:4 n-3)	[20290-75-9]	2,83 ± 0,17	µmol/L
Reference value, Serum 3	Eicosanoic acid (Arachidic acid) (C20:0)	[506-30-9]	26,0 ± 9,0	µmol/L
Reference value, Serum 3	(Z)-11-Eicosenoic acid (Gondoic acid) (C20:1 n-9)	[5561-99-9]	19,4 ± 1,4	µmol/L
Reference value, Serum 3	(Z,Z,Z)-5,8,11-Eicosatrienoic acid (C20:3 n-9)		7,54 ± 0,10	µmol/L
Reference value, Serum 3	Docosanoic acid (Behenic acid) (C22:0)	[112-85-6]	58 ± 14	µmol/L
Reference value, Serum 3	(Z)-13-Docosenoic acid (Erucic acid) (C22:1 n-9)	[112-86-7]	6 ± 4	µmol/L
Reference value, Serum 3	(Z,Z)-13,16-Docosadienoic acid (C22:2 n-6)		0,92 ± 0,01	µmol/L

Reference value, Serum 3	(Z,Z,Z,Z)-4,7,10,13,16- Docosapentaenoic acid (C22:5 n-6)		16,0 ± 1,3	µmol/L
Reference value, Serum 3	Tricosanoic acid (C23:0)	[2433-96-7]	22,3 ± 0,2	µmol/L
Reference value, Serum 3	Tetracosanoic acid (Lignoceric acid) (C24:0)	[557-59-5]	49 ± 16	µmol/L
Reference value, Serum 3	(Z)-15-Tetracosenoic acid (Nervonic Acid) (C24:1 n-9)	[506-37-6]	61 ± 25	µmol/L
Reference value, Serum 3	Hexacosanoic acid (Cerotic acid) (C26:0)	[506-46-7]	0,86 ± 0,2	µmol/L
Reference value, Serum 3	(7R,11R)-3,7,11,15-Tetramethyl-hexadecanoic acid (Phytanic acid)	[14721-66-5]	1,56 ± 0,18	µmol/L