

**Supplemental Table 2**

ID	Common name	Abbr.	Synonyms	Category	Main class
1-acyl LPC	2-Lysophosphatidylcholine	LysoPC	LPC	[GP]	Glycerophosphocholines [GP01]
1-acyl LPE	2-Lysophosphatidylethanolamine	LysoPE	LPE	[GP]	Glycerophosphoethanolamines [GP02]
2-acyl LPC	1-Lysophosphatidylcholine	LysoPC	LPC	[GP]	Glycerophosphocholines [GP01]
2-acyl LPE	1-Lysophosphatidylethanolamine	LysoPE	LPE	[GP]	Glycerophosphoethanolamines [GP02]
BMP	Lysobisphosphatidic acid	LBPA	BMP, bis(monoacylglycero)phosphate	[GP]	Glycerophosphoglycerols [GP04]
CE	Cholesteryl ester	CE		[ST]	Sterols [ST01]
Cer[d]	Ceramide	Cer[d]		[SP]	Ceramides [SP02]
CL	Cardiolipin	CL		[GP]	Glycerophosphoglycerophosphoglycerols [GP12]
DG	Diacylglycerol	DG	DAG	[GL]	Diradylglycerols [GL02]
DG-o	Alkylacylglycerol	DG-o		[GL]	Diradylglycerols [GL02]
DG-p	Alkenylacylglycerol	DG-p		[GL]	Diradylglycerols [GL02]
Hex2Cer[d]	Dihexosylceramide	Hex2Cer	Glc2Cer; Gal2Cer; LacCer	[SP]	Neutral glycosphingolipids [SP05]
Hex2Cer[t]	Hydroxy-dihexosylceramide	Hex2Cer		[SP]	Neutral glycosphingolipids [SP05]
HexCer[d]	Hexocylceramide	HexCer	GlcCer; GalCer	[SP]	Neutral glycosphingolipids [SP05]
HexCer[t]	Hydroxy-hexosylceramide	HexCer		[SP]	Neutral glycosphingolipids [SP05]
LPA	Lysophosphatic acid	LPA		[GP]	Glycerophosphates [GP10]
LPC	Lysophosphatidylcholine	LysoPC	LPC	[GP]	Glycerophosphocholines [GP01]
LPC-o	Alkyllysophosphatidylcholine	LysoPC(O)		[GP]	Glycerophosphocholines [GP01]
LPC-o+p	Alkyl/alkenyllysophosphatidylcholine	LysoPC(')		[GP]	Glycerophosphocholines [GP01]
LPC-p	Alkenyllysophosphatidylcholine	LysoPC(P)		[GP]	Glycerophosphocholines [GP01]
LPE	Lysophosphatidylethanolamine	LysoPE	LPE	[GP]	Glycerophosphoethanolamines [GP02]
LPE-o	Alkyllysophosphatidylethanolamine	LysoPE(O)		[GP]	Glycerophosphoethanolamines [GP02]
LPE-o+p	Alkyl/alkenyllysophosphatidylethanolamine	LysoPE(')		[GP]	Glycerophosphoethanolamines [GP02]
LPE-p	Alkenyllysophosphatidylethanolamine	LysoPE(P)		[GP]	Glycerophosphoethanolamines [GP02]
LPG	Lysophosphatidylglycerol	LysoPG	LPG	[GP]	Glycerophosphoglycerols [GP04]
PA	Phosphatidic acid	PA		[GP]	Glycerophosphates [GP10]
PC	Phosphatidylcholine	PC		[GP]	Glycerophosphocholines [GP01]
PC-o	Alkylphosphatidylcholine	PC(O)		[GP]	Glycerophosphocholines [GP01]
PC-o+p	Alkyl/alkenylphosphatidylcholine	PC(')		[GP]	Glycerophosphocholines [GP01]
PC-p	Alkenylphosphatidylcholine	PC(P)		[GP]	Glycerophosphocholines [GP01]
PE	Phosphatidylethanolamine	PE		[GP]	Glycerophosphoethanolamines [GP02]
PE-o	Alkylphosphatidylethanolamine	PE(O)		[GP]	Glycerophosphoethanolamines [GP02]
PE-o+p	Alkyl/alkenylphosphatidylethanolamine	PE(')		[GP]	Glycerophosphoethanolamines [GP02]
PE-p	Alkenylphosphatidylethanolamine	PE(P)		[GP]	Glycerophosphoethanolamines [GP02]
PG	Phosphatidylglycerols	PG		[GP]	Glycerophosphoglycerols [GP04]
PI	Phosphatidylinositol	PI		[GP]	Glycerophosphoinositols [GP06]
PS	Phosphatidylserine	PS		[GP]	Glycerophosphoserines [GP03]
SM[d]	Sphingomyelin/Ceramide phosphocholines	SM[d]		[SP]	Phosphosphingolipids [SP03]
SM[t]	Hydroxysphingomyelin	SM[t]		[SP]	Phosphosphingolipids [SP03]
SPH[d]	Sphingosine, Sphinganine	SPH[d]		[SP]	Sphingoid bases [SP01]
TG	Triacylglycerols	TG	TAG	[GL]	Triradylglycerols [GL03]
TG-o	Alkyldiacylglycerol	TG-o		[GL]	Triradylglycerols [GL03]

Supplemental Table 2: Nomenclature overview of all lipid classes annotated in this study.