



biocrates
The future of research and health

AbsoluteIDQ[®] p180 kit

List of metabolites – Old vs. new nomenclature

biocrates.com



AbsoluteIDQ® p180 kit

Update of lipid nomenclature – Comparison of old vs. new nomenclature

The AbsoluteIDQ® p180 kit is a simple and high-throughput tool for basic, clinical, and epidemiological research, making it the most frequently chosen metabolomics approach of its kind.

To harmonize the nomenclature for fatty acids and lipid classes covered in biocrates kits, we have updated the nomenclature according to the standard nomenclature used by **LIPID MAPS®**:

Liebisch et al. Update on LIPID MAPS classification, nomenclature, and shorthand notation for MS-derived lipid structures. *J. Lipid Res.* 2020; 61(12):1539–55. DOI: [10.1194/jlr.S120001025](https://doi.org/10.1194/jlr.S120001025).

The tables below show a side-by-side comparison of old vs. new nomenclature. A hyphen (“-”) indicates no change in nomenclature.

Analyte class		Number of metabolites		Analytical method
		Old nomenclature	New nomenclature	
Small molecules (43)	Amino acids	21	21	LC-MS/MS
	Biogenic amines	21	21	
	Monosaccharides	1	1	
Lipids (145)	Acylcarnitines	40	40	FIA-MS/MS
	Glycerophospholipids	90	90	
	Sphingomyelins	15	15	

Amino acids			
Old nomenclature (21)		New nomenclature (20)	
Ala	Alanine	-	-
Arg	Arginine	-	-
Asn	Asparagine	-	-
Asp	Aspartate	-	-
Cit	Citrulline	-	-
Glu	Glutamate	-	-
Gln	Glutamine	-	-
Gly	Glycine	-	-
His	Histidine	-	-
Ile	Isoleucine	-	-
Leu	Leucine	-	-
Lys	Lysine	-	-
Met	Methionine	-	-
Orn	Ornithine	-	-
Phe	Phenylalanine	-	-
Pro	Proline	-	-
Ser	Serine	-	-
Thr	Threonine	-	-
Trp	Tryptophan	-	-
Tyr	Tyrosine	-	-
Val	Valine	-	-

Biogenic amines			
Old nomenclature (21)		New nomenclature (21)	
Ac-Orn	Acetylornithine	-	-
alpha-AAA	α -Amino adipic acid	-	-
ADMA	Asymmetric dimethylarginine	-	-
Carnosine	Carnosine	-	-
Creatinine	Creatinine	-	-
DOPA	Dihydroxyphenylalanine	-	-
Dopamine	Dopamine	-	-
Histamine	Histamine	-	-
c4-OH-Pro	cis-4-Hydroxyproline	-	-
t4-OH-Pro	trans-4-Hydroxyproline	-	-
Kynurenine	Kynurenine	-	-
Met-SO	Methionine sulfoxide	-	-
Nitro-Tyr ¹	Nitrotyrosine	-	-
PEA	Phenylethylamine	-	-
Putrescine	Putrescine	-	-
Sarcosine	Sarcosine	-	-
Serotonin	Serotonin	-	-
Spermidine	Spermidine	-	-
Spermine	Spermine	-	-
SDMA	Symmetric dimethylarginine	-	-
Taurine	Taurine	-	-

¹ SCIEX and Waters only

Monosaccharides			
Old nomenclature (1)		New nomenclature (1)	
H1	Hexoses (including glucose)	-	-

Acylcarnitines			
Old nomenclature (40)		New nomenclature (40)	
C0	Carnitine	-	-
C2	Acetylcarnitine	-	-
C3	Propionylcarnitine	-	-
C3-OH	Hydroxypropionylcarnitine	-	-
C3:1	Propenoylcarnitine	-	-
C4	Butyrylcarnitine	-	-
C4-OH (C3-DC)	Hydroxybutyrylcarnitine (Malonylcarnitine)	-	-
C4:1	Butenylcarnitine	-	-
C5	Valerylcarnitine	-	-
C5-DC (C6-OH)	Glutaryl carnitine (Hydroxyhexanoylcarnitine)	-	-
C5-M-DC	Methylglutaryl carnitine	-	-
C5-OH (C3-DC-M)	Hydroxyvalerylcarnitine (Methylmalonylcarnitine)	-	-
C5:1	Tiglylcarnitine	-	-
C5:1-DC	Glutaconylcarnitine	-	-
C6 (C4:1-DC)	Hexanoylcarnitine (Fumaryl carnitine)	-	-
C6:1	Hexenoylcarnitine	-	-
C7-DC	Pimeloylcarnitine	-	-
C8	Octanoylcarnitine	-	-
C9	Nonaylcarnitine	-	-
C10	Decanoylcarnitine	-	-
C10:1	Decenoylcarnitine	-	-
C10:2	Decadienoylcarnitine	-	-
C12	Dodecanoylcarnitine	-	-
C12-DC	Dodecanedioylcarnitine	-	-
C12:1	Dodecenoylcarnitine	-	-
C14	Tetradecanoylcarnitine	-	-
C14:1	Tetradecenoylcarnitine	-	-
C14:1-OH	Hydroxytetradecenoylcarnitine	-	-
C14:2	Tetradecadienoylcarnitine	-	-
C14:2-OH	Hydroxytetradecadienoyl- carnitine	-	-
C16	Hexadecanoylcarnitine	-	-
C16-OH	Hydroxyhexadecanoylcarnitine	-	-
C16:1	Hexadecenoylcarnitine	-	-
C16:1-OH	Hydroxyhexadecenoylcarnitine	-	-
C16:2	Hexadecadienoylcarnitine	-	-
C16:2-OH	Hydroxyhexadecadienoyl- carnitine	-	-

Acylcarnitines (continued)			
Old nomenclature (40)		New nomenclature (40)	
C18	Octadecanoylcarnitine	–	–
C18:1	Octadecenoylcarnitine	–	–
C18:1-OH	Hydroxyoctadecenoylcarnitine	–	–
C18:2	Octadecadienylcarnitine	–	–

Glycerophospholipids	
Old nomenclature (90)	New nomenclature (90)
lysoPC a C14:0	LPC 14:0
lysoPC a C16:0	LPC 16:0
lysoPC a C16:1	LPC 16:1
lysoPC a C17:0	LPC 17:0
lysoPC a C18:0	LPC 18:0
lysoPC a C18:1	LPC 18:1
lysoPC a C18:2	LPC 18:2
lysoPC a C20:3	LPC 20:3
lysoPC a C20:4	LPC 20:4
lysoPC a C24:0	LPC 24:0
lysoPC a C26:0	LPC 26:0
lysoPC a C26:1	LPC 26:1
lysoPC a C28:0	PC O-28:0
lysoPC a C28:1	PC O-28:1
PC aa C24:0	PC 24:0
PC aa C26:0	PC 26:0
PC aa C28:1	PC 28:1
PC aa C30:0	PC 30:0
PC aa C30:2 ²	PC 30:2 ²
PC aa C32:0	PC 32:0
PC aa C32:1	PC 32:1
PC aa C32:2	PC 32:2
PC aa C32:3	PC 32:3
PC aa C34:1	PC 34:1
PC aa C34:2	PC 34:2
PC aa C34:3	PC 34:3
PC aa C34:4	PC 34:4
PC aa C36:0	PC 36:0
PC aa C36:1	PC 36:1
PC aa C36:2	PC 36:2
PC aa C36:3	PC 36:3
PC aa C36:4	PC 36:4
PC aa C36:5	PC 36:5
PC aa C36:6	PC 36:6
PC aa C38:0	PC 38:0
PC aa C38:1 ²	PC 38:1 ²
PC aa C38:3	PC 38:3

² SCIEX and Agilent only

Glycerophospholipids (continued)	
Old nomenclature (90)	New nomenclature (90)
PC aa C38:4	PC 38:4
PC aa C38:5	PC 38:5
PC aa C38:6	PC 38:6
PC aa C40:1	PC 40:1
PC aa C40:2	PC 40:2
PC aa C40:3	PC 40:3
PC aa C40:4	PC 40:4
PC aa C40:5	PC 40:5
PC aa C40:6	PC 40:6
PC aa C42:0	PC 42:0
PC aa C42:1	PC 42:1
PC aa C42:2	PC 42:2
PC aa C42:4	PC 42:4
PC aa C42:5	PC 42:5
PC aa C42:6	PC 42:6
PC ae C30:0	PC O-30:0
PC ae C30:1	PC O-30:1
PC ae C30:2	PC O-30:2
PC ae C32:1	PC O-32:1
PC ae C32:2	PC O-32:2
PC ae C34:0	PC O-34:0
PC ae C34:1	PC O-34:1
PC ae C34:2	PC O-34:2
PC ae C34:3	PC O-34:3
PC ae C36:0	PC O-36:0
PC ae C36:1	PC O-36:1
PC ae C36:2	PC O-36:2
PC ae C36:3	PC O-36:3
PC ae C36:4	PC O-36:4
PC ae C36:5	PC O-36:5
PC ae C38:0	PC O-38:0
PC ae C38:1	PC O-38:1
PC ae C38:2	PC O-38:2
PC ae C38:3	PC O-38:3
PC ae C38:4	PC O-38:4
PC ae C38:5	PC O-38:5
PC ae C38:6	PC O-38:6
PC ae C40:1	PC O-40:1
PC ae C40:2	PC O-40:2
PC ae C40:3	PC O-40:3
PC ae C40:4	PC O-40:4
PC ae C40:5	PC O-40:5
PC ae C40:6	PC O-40:6
PC ae C42:0	PC O-42:0
PC ae C42:1	PC O-42:1
PC ae C42:2	PC O-42:2
PC ae C42:3	PC O-42:3

Glycerophospholipids (continued)	
Old nomenclature (90)	New nomenclature (90)
PC ae C42:4	PC O-42:4
PC ae C42:5	PC O-42:5
PC ae C44:3	PC O-44:3
PC ae C44:4	PC O-44:4
PC ae C44:5	PC O-44:5
PC ae C44:6	PC O-44:6

Sphingolipids	
Old nomenclature (15)	New nomenclature (15)
SM (OH) C14:1	SM 33:1
SM C16:0	SM 34:1
SM C16:1	SM 34:2
SM (OH) C16:1	SM 35:1
SM C18:0	SM 36:1
SM C18:1	SM 36:2
SM C20:2	SM 38:3
SM (OH) C22:1	SM 41:1
SM (OH) C22:2	SM 41:2
SM C22:3 ²	SM 40:4 ²
SM C24:0	SM 42:1
SM C24:1	SM 42:2
SM (OH) C24:1	SM 43:1
SM C26:0	SM 44:1
SM C26:1	SM 44:2

² SCIEX and Agilent only

Ordering

Webshop	shop.biocrates.com
Information request	biocrates.com/contact
E-mail	sales@biocrates.com

For research use only | not for use in diagnostic procedures



biocrates.com



[Video tutorials](#)



[Frequently Asked Questions \(FAQ\)](#)