

Table S1. Metabolite abbreviations and extended names

C0 , free carnitine
C2 , Acetylcarnitine
C3 Propionylcarnitine
C3 , Propionylcarnitine
C4 , Butyrylcarnitine
C5 , Isovalerylcarnitine
C6 , Hexanoylcarnitine
C8 , Octanoylcarnitine/Caprylylcarnitine
C10 , Decanoylcarnitine/Caprylcarnitine
C12 , Dodecanoylcarnitine/Laurylcarnitine
C14 , Tetradecanoylcarnitine/ Myristylcarnitine
C16 , Hexadecanoylcarnitine/Palmitoylcarnitine
C18 , Octadecanoylcarnitine/Stearyl carnitine
C5:1 , Tiglylcarnitine/3-Methyl-crotonylcarnitine
C6:1 , Hexenoylcarnitine
C8:1 , Octenoylcarnitine
C10:1 , Decenoylcarnitine
C10:2 , Decadienoylcarnitine
C12:1 , Dodecenoylcarnitine
C14:1 ; Tetradecenoylcarnitine
C14:2 , Tetradecadienoylcarnitine
C16:1 ; Hexadecenoylcarnitine
C18:1 ; Octadecenoylcarnitine
C18:2 ; Octadecadienoylcarnitine
C4OH , 3-Hydroxybutyrylcarnitine
C5OH , 3-Hydroxyisovalerylcarnitine/3-hydroxy-2 methylbutyrylcarnitine
C6OH , 3-Hydroxyhexanoylcarnitine
C12OH , 3-Hydroxydodecanoylcarnitine
C14OH , 3-Hydroxytetradecanoylcarnitine
C16OH , 3-Hydroxyhexadecanoylcarnitine
C16:1OH , 3-Hydroxyhexadecenoylcarnitine
C18:1OH , 3-Hydroxyoctadecenoylcarnitine
C3DC , Malonylcarnitine
C4DC , Methylmalonilcarnitine
C5DC , Glutarylcarnitine
C6DC , Methylglutarylcarnitine
C8DC , Octanedioylcarnitine
C10DC , Decanedioylcarnitine
Ala , Alanine
Val , Valine
Xle , Leucin or Isoleucine
Met , Methionine
Phe , Phenylalanine
Tyr , Tyrosine

Asp, Aspartic Acid

Glu, Glutamic Acid

Gly, Glycine

Orn, Ornithine

Cit, Citrulline

Arg, Arginine