
Product Data Sheet

Product Name: C18 Phytoceramide (t18:0/18:0)

Cat. No.: GC43052

Chemical Properties

Cas. No. 34354-88-6

SMILES OC[C@H](NC(CCCCCCCCCCCCCCCC)=O)[C@@H]([C@@H](CCCCCCCCCCCCC)O)OFormula C₃₆H₇₃NO₄

M.Wt 584

Solubility Chloroform:Methanol (1:1): Soluble (warmed) Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure **Background**

C18 Phytoceramide (t18:0/18:0) (Cer(t18:0/18:0)) is a bioactive sphingolipid found in *S. cerevisiae*, wheat grains, and the stratum corneum layer of mammalian epidermis. Cer(t18:0/18:0) is composed of a phytosphingosine backbone amine-linked to a C18 fatty acid chain. Cer(t18:0/18:0) has a role in regulation of apoptosis, cell differentiation, proliferation of smooth muscle cells, and inhibition of the mitochondrial respiratory chain. It also inhibits expression of the allergic cytokines IL-4, TNF- α , and transcription factors c-Jun and NF- κ B in histone-stimulated murine skin tissue. Formulations containing cer(t18:0/18:0) have been used used in cosmetics as a skin protectants as they reduce water loss to prevent epidermal dehydration and irritation.

Caution: Product has not been fully validated for medical applications. For research use only.

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