

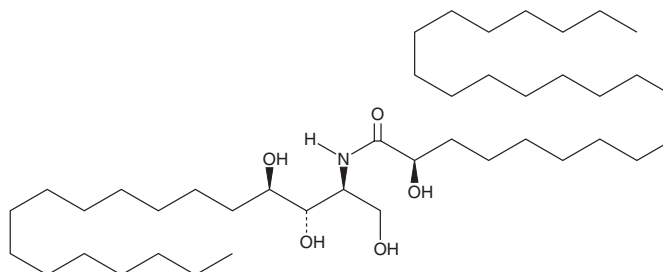
PRODUCT INFORMATION



C24 (2'(R)-hydroxy) Phytoceramide (t18:0/24:0)

Item No. 28933

CAS Registry No.: 154801-30-6
Formal Name: (2R)-N-[(1S,2S,3R)-2,3-dihydroxy-1-(hydroxymethyl)heptadecyl]-2-hydroxy-tetracosanamide
Synonyms: N-(R)- α -Hydroxytetracosanoyl-Phytosphingosine, C24(2'OH)Phy, 2'-(R)-hydroxy-C₂₄ Phytoceramide, N-24:0(2R-OH) Phytosphingosine, N-(R)- α -C24 Phytosphingosine (t18:0/24:0)
MF: C₄₂H₈₅NO₅
FW: 684.1
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

C24 (2'(R)-hydroxy) Phytoceramide (t18:0/24:0) is supplied as a solid. A stock solution may be made by dissolving the C24 (2'(R)-hydroxy) phytoceramide (t18:0/24:0) in the solvent of choice, which should be purged with an inert gas. C24 (2'(R)-hydroxy) Phytoceramide (t18:0/24:0) is soluble in the organic solvent ethanol (warmed). C24 (2'(R)-hydroxy) Phytoceramide (t18:0/24:0) is also soluble in a 4:1 solution of chloroform:methanol.

Description

C24 (2'(R)-hydroxy) Phytoceramide is a naturally occurring sphingolipid that has been found in adlay seed hull.¹ It inhibits LPS-induced nitric oxide (NO) production in RAW 264.7 macrophages (IC₅₀ = 19 µg/ml), as well as increases in COX-2 and inducible nitric oxide synthase (iNOS) levels. It increases production of chemokine (C-X-C motif) ligand 8 (CXCL8), CXCL1, chemokine (C-C motif) ligand 2 (CCL2), and CCL20 in human umbilical vein endothelial cells (HUVECs) in a concentration-dependent manner.² C24 (2'(R)-hydroxy) Phytoceramide is a hydroxylated form of C24 phytoceramide (Item No. 22827).

References

- Huang, D.-W., Chung, C.-P., Kuo, Y.-H., *et al.* Identification of compounds in adlay (*Coix lachryma-jobi* L. var. ma-yuen Stapf) seed hull extracts that inhibit lipopolysaccharide-induced inflammation in RAW 264.7 macrophages. *J. Agric. Food Chem.* **57(22)**, 10651-10657 (2009).
- Sekiya, M., Ueda, K., Okazaki, K., *et al.* A phytoceramide analog stimulates the production of chemokines through CREB activation in human endothelial cells. *Int. Immunopharmacol.* **11(10)**, 1497-1503 (2011).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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