

1,2-Dipalmitoyl-*sn*-glycerol

Catalog number: L-0016

Molecular Formula: C₃₅H₆₈O₅

MW: 568.91

CAS#: 30334-71-5

Alternate Name: 16:0 DAG

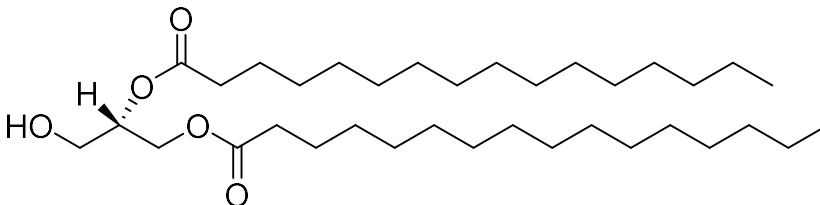
Solubility: chloroform, ethyl acetate, >10 mg/mL; DMSO <1 mg/mL

Storage and Handling: Store dry at 4 °C. Stock solutions should be stored frozen (-20 °C or below).

Background: 1,2-Diacylglycerols (DAGs) are formed in cells through the hydrolysis of phosphatidylinositol 4,5-bisphosphate by Phospholipase C. DAGs activate Protein Kinase C (PKC), which is a key regulator of signal transduction, cellular regulation, and tumor promotion.

References: 1) Lapetina, E.G., Reep, B., Ganong, B.R. & Bell, R.M., (1985), "Exogenous *sn*-1,2-diacylglycerols Containing Saturated Fatty Acids Functions as Bioregulators of Protein Kinase C in Human Platelets", *J. Biol. Chem.* **260**, 1358-1361.

2) Ganong, B.R., Loomis, C.R., Hannun, Y.A. & Bell, R.M., (1986), "Specificity and Mechanism of Protein Kinase C Activation by *sn*-1,2-diacylglycerols", *Proc. Natl. Acad. Sci. USA* **83**, 1184-1188.



Hazardous Properties and Cautions: The toxicological and pharmacological properties of this compound are not fully known. For further information see the MSDS on request. This product is manufactured and shipped only in small quantities, intended for research and development in a laboratory utilizing prudent procedures for handling chemicals of unknown toxicity, under the supervision of persons technically qualified to evaluate potential risks and authorized to enforce appropriate health and safety measures. As with all research chemicals, precautions should be taken to avoid unnecessary exposures or risks.

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Technical Data Sheet, Rev 2, 5/23/2024 – **For research use only.** Not intended for diagnostic or therapeutic use.