

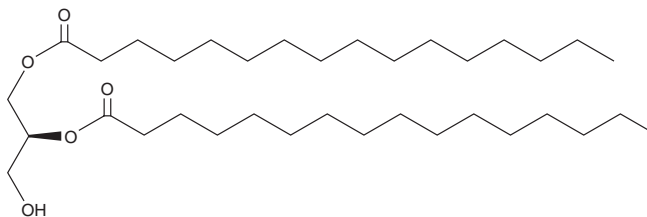
PRODUCT INFORMATION



1,2-Dipalmitoyl-*sn*-glycerol

Item No. 10008648

CAS Registry No.: 30334-71-5
Formal Name: 1,2-bis(O-palmitoyl)-*sn*-glycerol
Synonyms: 1,2-DPG, DG(16:0/16:0/0:0), NSC 269964
MF: C₃₅H₆₈O₅
FW: 568.9
Purity: ≥95%
Supplied as: A crystalline 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

1,2-Dipalmitoyl-*sn*-glycerol is supplied as a crystalline solid. A stock solution may be made by dissolving the 1,2-dipalmitoyl-*sn*-glycerol in the solvent of choice, which should be purged with an inert gas. 1,2-Dipalmitoyl-*sn*-glycerol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 1,2-dipalmitoyl-*sn*-glycerol in these solvents is approximately 30, 5, and 20 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of 1,2-dipalmitoyl-*sn*-glycerol can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 1,2-dipalmitoyl-*sn*-glycerol in PBS (pH 7.2) is approximately 0.25 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

1,2-Dipalmitoyl-*sn*-glycerol is a diacylglycerol that contains palmitic acid (Item No. 10006627) at the *sn*-1 and *sn*-2 positions. It activates protein kinase C (PKC) by 15% when used at a concentration of 25 μM.¹ 1,2-Dipalmitoyl-*sn*-glycerol promotes exponential growth of *Frankia* Gram-positive bacteria.²

References

1. Walker, J.M. and Sando, J.J. Activation of protein kinase C by short chain phosphatidylcholines. *J. Biol. Chem.* **263**(10), 4537-4540 (1988).
2. Selim, S. and Schwencke, J. 1,2-dipalmitoyl phosphatidylcholine, 1,2-dipalmitoyl phosphatidic acid or 1,2-dipalmitoyl-*sn*-glycerol inhibit sporangia formation and promote exponential growth of various *Frankia* isolates from the casuarinaceae family. *Soil Biol. Biochem.* **26**(5), 569-575 (1994).

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.

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