

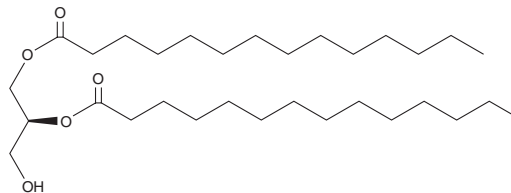
PRODUCT INFORMATION



1,2-Dimyristoyl-*sn*-glycerol

Item No. 15077

CAS Registry No.: 60562-16-5
Formal Name: tetradecanoic acid, 1,1'-[(1S)-1-(hydroxymethyl)-1,2-ethanediyl] ester
Synonym: 1,2-DMG
MF: C₃₁H₆₀O₅
FW: 512.8
Purity: ≥98%
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-Dimyristoyl-*sn*-glycerol (1,2-DMG) is supplied as a crystalline solid. A stock solution may be made by dissolving the 1,2-DMG in the solvent of choice, which should be purged with an inert gas. 1,2-DMG is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 1,2-DMG in these solvents is approximately 30, 7, 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-DMG can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 1,2-DMG 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-DMG is a saturated diacylglycerol (DAG) with myristic acid (14:0) side-chains attached at both the *sn*-1 and *sn*-2 positions. Most saturated DAGs, including 1,2-DMG, are weak second messengers for the activation of the PKC.¹

Reference

1. Sánchez-Piñera, P., Micol, V., Corbalán-García, S., *et al.* A comparative study of the activation of protein kinase C α by different diacylglycerol isomers. *Biochem. J.* **337**(3), 387-395 (1999).

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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