

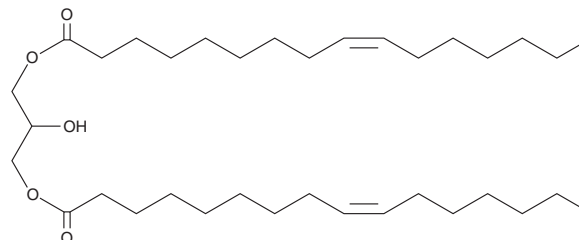
PRODUCT INFORMATION



1,3-Dipalmitoleoyl Glycerol

Item No. 26797

CAS Registry No.: 106352-09-4
Formal Name: (9Z,9'Z)-9-hexadecenoic acid, 1,1'-(2-hydroxy-1,3-propanediyl) ester
Synonyms: DG(16:1/0:0/16:1), 1,3-Dipalmitolein
MF: C₃₅H₆₄O₅
FW: 564.9
Purity: ≥98%
Supplied as: A 10 mg/ml solution in ethanol
Storage: -20°C
Stability: ≥1 year



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

Laboratory Procedures

1,3-Dipalmitoleoyl glycerol is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. 1,3-Dipalmitoleoyl glycerol is soluble in the organic solvent dimethyl formamide at a concentration of approximately 10 mg/ml.

1,3-Dipalmitoleoyl glycerol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 1,3-dipalmitoleoyl glycerol should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. 1,3-Dipalmitoleoyl glycerol has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

1,3-Dipalmitoleoyl glycerol is a diacylglycerol with palmitoleic acid (Item No. 10009871) at the *sn*-1 and *sn*-3 positions. It selectively inhibits α -glucosidase from *S. cerevisiae* over rat enzyme (IC_{50} s = 4.45 and 9,326.5 μ M, respectively).¹ 1,3-Dipalmitoleoyl glycerol has been used in the formation of lipid bilayers to study the effects of membrane composition and the ionophore valinomycin (Item No. 10009152) on membrane potential.²

References

1. Nguyen, T.H. and Kim, S.M. α -Glucosidase inhibitory activities of fatty acids purified from the internal organ of sea cucumber *Stichopus japonicus*. *J. Food Sci.* **80**(4), H841-H847 (2015).
2. Minami, H., Sato, N., Sugawara, M., *et al.* Comparative study on the potentiometric responses between a valinomycin-based bilayer lipid membrane and a solvent polymeric membrane. *Anal. Sci.* **7**(6), 853-862 (1991).

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM