

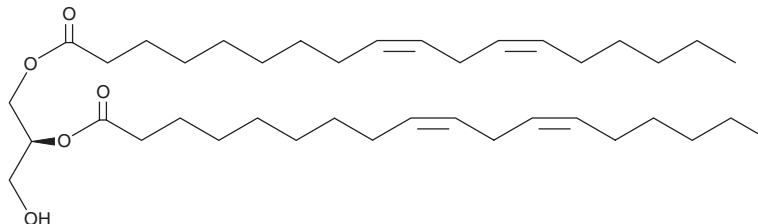
PRODUCT INFORMATION



1,2-Dilinoleoyl-*sn*-glycerol

Item No. 25422

CAS Registry No.: 24529-89-3
Formal Name: 9Z,12Z-octadecadienoic acid, 1,1'-[(1S)-1-(hydroxymethyl)-1,2-ethanediyl] ester
Synonym: 1,2-Dioleoyl-*sn*-glycerol
MF: C₃₉H₆₈O₅
FW: 617.0
Purity: ≥95%
UV/Vis.: λ_{max}: 271 nm
Supplied as: A solution in acetonitrile
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

1,2-Dilinoleoyl-*sn*-glycerol is supplied as a solution in acetonitrile. To change the solvent, simply evaporate the acetonitrile under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of 1,2-dilinoleoyl-*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. If an organic solvent-free solution of 1,2-dilinoleoyl-*sn*-glycerol is needed, it can be prepared by evaporating the acetonitrile and directly dissolving the neat oil in aqueous buffers. The solubility of 1,2-dilinoleoyl-*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-Dilinoleoyl-*sn*-glycerol is a diacylglycerol (DAG) with linoleic acid (Item No. 90150) (18:2) side chains attached at both the *sn*-1 and *sn*-2 positions. It has been found as a component of phosphatidic acid in rat liver mitochondria and in spinach chloroplast membranes.^{1,2} 1,2-Dilinoleoyl-*sn*-glycerol is upregulated in some pregnant women and has been used as a biomarker to predict later preeclampsia in early pregnancy.³

References

1. Rustow, B., Schlame, M., Rabe, H., *et al.* Species pattern of phosphatidic acid, diacylglycerol, CDP-diacylglycerol and phosphatidylglycerol synthesized de novo in rat liver mitochondria. *Biochem. Biophys. Acta.* 1002(2), 261-263 (1989).
2. Maréchal, E., Block, M.A., Joyard, J., *et al.* Comparison of the kinetic properties of MGDG synthase in mixed micelles and in envelope membranes from spinach chloroplast. *FEBS Lett.* 352(3), 307-310 (1994).
3. Kenny, L., Baker, P.N., and Broadhurst, D. Detection risk of pre-eclampsia. **US 92262,582,B2** (2016).

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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