1,2-Dioleoyl-rac-glycerol
Item No. 10007863

CAS Registry No.: 2442-61-7
Formal Name: 9Z-octadecenoic acid,
1,1'-[1-(hydroxymethyl)-1,2-ethanediyl] ester
Synonyms: (±)-1,2-Diolein, rac-Glycerol
1,2-dioleate
MF: C_{39}H_{72}O_{5}
FW: 621.0
Purity: ≥95%
Supplied as: A solution in acetonitrile
Storage: -80°C
Stability: As supplied, 1 year from the QC date provided on the Certificate of Analysis, when stored properly

Laboratory Procedures

1,2-Dioleoyl-rac-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 and dimethyl formamide purged with an inert gas can be used. The solubility of 1,2-dioleoyl-rac-glycerol in these solvents is approximately 10 mg/ml.

1,2-Dioleoyl-rac-glycerol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 1,2-dioleoyl-rac-glycerol should be diluted with the aqueous buffer of choice. 1,2-Dioleoyl-rac-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

1,2-Dioleoyl-rac-glycerol is a form of diacylglycerol (DAG) where both acyl groups consist of the 18:1 oleoyl chain. It effectively binds the C1 domain to activate conventional protein kinase C forms and serves as a substrate for DAG kinases and multisubstrate lipid kinase.1-3

References