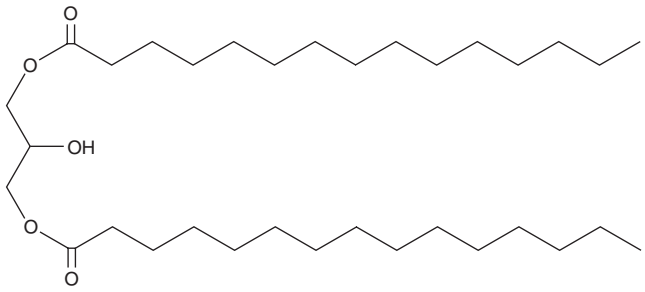
PRODUCT INFORMATION

1,3-Dipentadecanoyl Glycerol

Item No. 26994

CAS Registry No.:	59891-25-7
Formal Name:	pentadecanoic acid, 1,1'-(2-hydroxy-1,3-propanediyl) ester
Synonyms:	1,3-Dipentadecanoin, DG(15:0/0:0/15:0)
MF:	$C_{33}H_{64}O_5$
FW:	540.9
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

1,3-Dipentadecanoyl glycerol is supplied as a crystalline solid. A stock solution may be made by dissolving the 1,3-dipentadecanoyl glycerol in the solvent of choice, which should be purged with an inert gas. 1,3-Dipentadecanoyl glycerol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 1,3-dipentadecanoyl glycerol in these solvents is approximately 0.25, 30, 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 1,3-dipentadecanoyl glycerol can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 1,3-dipentadecanoyl glycerol in PBS, pH 7.2, is approximately 0.7 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

1,3-Dipentadecanoyl glycerol is a diacylglycerol that contains pentadecanoic acid (Item No. 17399) at the *sn*-1 and *sn*-3 positions. It has been used as an internal standard for the quantification of ceramides and diacylglycerols in rat soleus muscle by LC-MS/MS.[1]

Reference

1. Yu, C., Chen, Y., Cline, G.W., *et al.* Mechanism by which fatty acids inhibit insulin activation of insulin receptor substrate-1 (IRS-1)-associated phosphatidylinositol 3-kinase activity in muscle. *J. Biol. Chem.* **277(52)**, 50230-50236 (2002).

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