

Product Information

SQDG(16:0/16:1(11Z))

Cat. No.: X26-02-ZQ278

Size: 1 mg; 10 mg; 25 mg; 100 mg

Compound CID: 42607405

Synonym: 1-hexadecanoyl-2-(11Z-hexadecenoyl)-3-(6'-sulfo- α -D-quinovosyl)-sn-glycerol

This product is for research use only and is not intended for diagnostic use.

Product Information

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| Description | A regioisomer of SQDG featuring a C16:0 chain and a 16:1(11Z) chain; the double bond position influences the transition temperature and packing density of the lipid. |
| Molecular Weight | 793.1 |
| Molecular Formula | C ₄₁ H ₇₆ O ₁₂ S |
| IUPAC Name | [(2S,3S,6S)-6-[(2S)-3-hexadecanoyloxy-2-[(Z)-hexadec-11-enoyl]oxypropoxy]-3,4,5-trihydroxyoxan-2-yl]methanesulfonic acid |
| InChI | InChI=1S/C41H76O12S/c1-3-5-7-9-11-13-15-17-19-21-23-25-27-29-36(42)50-31-34(32-51-41-40(46)39(45)38(44)35(53-41)33-54(47,48)49)52-37(43)30-28-26-24-22-20-18-16-14-12-10-8-6-4-2/h10,12,34-35,38-41,44-46H,3-9,11,13-33H2,1-2H3,(H,47,48,49)/b12-10-/t34-,35-,38-,39?,40?,41+/m1/s1 |
| InChI Key | RXRZHPAKOJENQX-JLCRUMJNSA-N |
| Canonical SMILES | CCCCCCCCCCCCCCCC(=O)OC[C@H](CO[C@@H]1C(C([C@@H]([C@H](O1)CS(=O)(=O)O)O)O)OC(=O)CCCCCCCC/C=C\CCCC |
| Source | Chemical synthesis |
| Form | Solid or liquid |
| Purity | ≥90% |
| Identity | Confirmed by NMR/HPLC/MS. |
| Stability | The product is stable for one year when stored at the recommended temperature in lyophilized powder. |
| Quality Level | Research level |
| Applications | SQDG(16:0/16:1(11Z)) can be used in membrane biology to evaluate how specific double-bond positions influence lipid-protein interactions in the chloroplast. |
| Storage | Store at -20°C. |