12-Doxylstearic Acid
Item No. 19259

CAS Registry No.: 29545-47-9
Formal Name: 2-(10-carboxydecyl)-2-hexyl-4,4-dimethyl-3-oxazolidinylxoy
Synonym: 12-DSA
MF: C_{22}H_{42}NO_{4}
FW: 384.6
Purity: ≥95%
UV/Vis.: λ_{max}: 226 nm
Supplied as: A solution in ethanol
Storage: -20°C
Stability: As supplied, 1 year from the QC date provided on the Certificate of Analysis, when stored properly

Laboratory Procedures

12-Doxylstearic acid (12-DSA) 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. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of 12-DSA in these solvents is approximately 20, 10, and 30 mg/ml, respectively.

12-DSA is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

12-DSA is a form of stearic acid (Item No. 10011298) that contains a 4,4-dimethyl-3-oxazolinyloxy (DOXYL) group, creating a hydrophobic spin label. It is commonly used to study molecular aspects of membranes and hydrophobic proteins.1-3

References


PRODUCT INFORMATION