

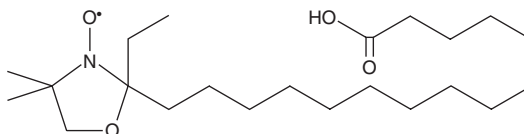
PRODUCT INFORMATION



16-doxyl Stearic Acid

Item No. 20355

CAS Registry No.: 53034-38-1
Formal Name: 2-(14-carboxytetradecyl)-2-ethyl-4,4-dimethyl-3-oxazolidinyloxy
Synonym: 16-DSA
MF: $C_{22}H_{42}NO_4$
FW: 384.6
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 230 nm
Supplied as: A crystalline solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



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

Laboratory Procedures

16-doxyl Stearic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the 16-doxyl stearic acid in the solvent of choice. 16-doxyl Stearic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of 16-doxyl stearic acid in these solvents is approximately 20, 10, and 30 mg/ml, respectively.

Description

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

References

1. Kormosh, N.G., Davidova, T.V., Kopyltsov, V.N., *et al.* Conformational changes in inter- α -trypsin inhibitor heavy chain 4 activate its tumor-specific activity in mice with B16 melanoma. *Mol. Med. Rep.* **12**(3), 4483-4493 (2015).
2. Laulagnier, K., Motta, C., Hamdi, S., *et al.* Mast cell- and dendritic cell-derived exosomes display a specific lipid composition and an unusual membrane organization. *Biochem. J.* **380**(Pt. 1), 161-171 (2004).
3. Vishnyakova, E.A., Ruuge, A.E., Golovina, E.A., *et al.* Spin-labeling study of membranes in wheat embryo axes. 1. Partitioning of doxyl stearates into the lipid domains. *Biochim. Biophys. Acta.* **1467**(2), 380-394 (2000).

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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