

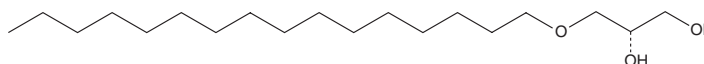
PRODUCT INFORMATION



1-O-Hexadecyl-*sn*-glycerol

Item No. 25723

CAS Registry No.: 506-03-6
Formal Name: 3-(hexadecyloxy)-1,2S-propanediol
Synonyms: α -Chimyl Alcohol, (S)-(+)-Chimyl Alcohol
MF: C₁₉H₄₀O₃
FW: 316.5
Purity: \geq 95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years



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

Laboratory Procedures

1-O-Hexadecyl-*sn*-glycerol is supplied as a crystalline solid. A stock solution may be made by dissolving the 1-O-hexadecyl-*sn*-glycerol in the solvent of choice. 1-O-Hexadecyl-*sn*-glycerol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of 1-O-hexadecyl-*sn*-glycerol in these solvents is approximately 5, 0.16, and 16 mg/ml, respectively.

Description

1-O-Hexadecyl-*sn*-glycerol is a bioactive alkyl glyceryl ether.^{1,2} It reduces UVB-induced cell death and production of reactive oxygen species (ROS) and prostaglandin E₂ (PGE₂; Item No. 14010) in normal human epidermal keratinocytes (NHEKs).¹ 1-O-Hexadecyl-*sn*-glycerol (50 μ M) increases coronary flow and left ventricular developed pressure and reduces malondialdehyde (MDA) formation *ex vivo* in a rat heart model of ischemia/reperfusion injury.²

References

1. Yokota, M., Yahagi, S., Tokudome, Y., *et al.* Chimyl alcohol suppresses PGE₂ synthesis by human epidermal keratinocytes through the activation of PPAR- γ . *J. Oleo. Sci.* **67(4)**, 455-462 (2018).
2. Maulik, N., Tosaki, A., Engelman, R.M., *et al.* Myocardial salvage by chimyl alcohol: Possible role of peroxisomal dysfunction in reperfusion injury. *Ann. N.Y. Acad. Sci.* **723(1)**, 380-384 (1994).

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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