

PRODUCT INFORMATION

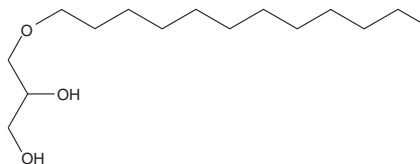


1-O-Dodecyl-*rac*-glycerol

Item No. 17441

CAS Registry No.: 1561-07-5
Formal Name: 3-(dodecyloxy)-1,2-propanediol
Synonyms: 2,3-Dihydroxypropyl dodecyl ether, DDG,
1-O-Lauryl-*rac*-glycerol, Lauryl glyceryl ether,
MG(O-12:0/0:0/0:0), NSC 38645

MF: $C_{15}H_{32}O_3$
FW: 260.4
Purity: $\geq 95\%$
Supplied as: A 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-O-Dodecyl-*rac*-glycerol is supplied as a solid. A stock solution may be made by dissolving the 1-O-dodecyl-*rac*-glycerol in the solvent of choice, which should be purged with an inert gas. 1-O-Dodecyl-*rac*-glycerol is soluble in methanol.

Description

1-O-Dodecyl-*rac*-glycerol is an alkyl glyceryl ether. It is also a nonionic surfactant.¹ 1-O-Dodecyl-*rac*-glycerol increases autolysin activity in *S. faecium* and inhibits peptidoglycan synthesis in *S. mutans*.² It induces mouse peritoneal macrophage activation *ex vivo* when administered at a dose of 100 ng/animal.³ 1-O-Dodecyl-*rac*-glycerol (4 and 8 mg/animal) increases survival in an Ehrlich murine ascites tumor model.⁴

References

1. de Paula, F.H.M., de Freitas, F.A., Nunes, D.G., *et al.* Alkyl glyceryl ethers as water-based lubricant additives in mixtures with xanthan gum. *Colloids and Surfaces A: Physicochemical and Engineering Aspects* **634**, 127881 (2022).
2. Ved, H.S., Gustow, E., and Pieringer, R.A. Inhibition of peptidoglycan synthesis of *Streptococcus faecium* ATCC 9790 and *Streptococcus mutans* BHT by the antibacterial agent dodecyl glycerol. *Biosci. Rep.* **4**(8), 659-664 (1984).
3. Yamamoto, N., St. Claire, D.A., Homma, S., *et al.* Activation of mouse macrophages by alkylglycerols, inflammation products of cancerous tissues. *Cancer Res.* **48**(21), 6044-6049 (1988).
4. Ando, K., Kodama, K., Kato, A., *et al.* Antitumor activity of glyceryl ethers. *Cancer Res.* **32**(1), 125-129 (1972).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 02/05/2024

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