

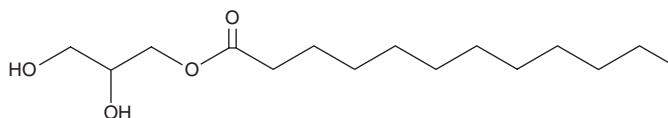
PRODUCT INFORMATION



1-Lauroyl-*rac*-glycerol

Item No. 28170

CAS Registry No.: 142-18-7
Formal Name: dodecanoic acid,
2,3-dihydroxypropyl ester
Synonyms: MG(12:0/0:0/0:0), 1-Monolaurin,
NSC 698570
MF: $C_{15}H_{30}O_4$
FW: 274.4
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-Lauroyl-*rac*-glycerol is supplied as a solid. A stock solution may be made by dissolving the 1-lauroyl-*rac*-glycerol in the solvent of choice, which should be purged with an inert gas. 1-Lauroyl-*rac*-glycerol is soluble in organic solvents such as ethanol and dimethyl formamide. The solubility of 1-lauroyl-*rac*-glycerol in these solvents is approximately 15 mg/ml.

Description

1-Lauroyl-*rac*-glycerol is a monoacylglycerol that contains lauric acid (Item No. 10006626) at the *sn*-1 position. It is active against pneumococci, group A streptococci, β -hemolytic non-group A streptococci, corynebacteria, *N. asteroides*, micrococci, *S. aureus*, *S. epidermidis*, and *C. albicans* (MICs = 0.045-0.09 $\mu\text{mol/ml}$).¹ It is also active against a panel of 16 fungi when used at a concentration of 0.1% in growth media.² Dietary administration of 1-lauroyl-*rac*-glycerol (2% w/w) reduces *S. mutans* colony forming units (CFUs) on tooth surfaces and severity of sucrose-induced dental caries in rats.³

References

1. Kabara, J.J., Swieczkowski, D.M., Conley, A.J., et al. Fatty acids and derivatives as antimicrobial agents. *Antimicrob. Agents Chemother.* **2**(1), 23-28 (1972).
2. Lisker, N. and Paster, N. Antifungal activity of monolaurin and related compounds. *J. Food Saf.* **4**(1), 27-34 (1982).
3. Lynch, P., Kabara, J.J., and Schemmel, R. *Streptococcus mutans* colony forming units and severity of dental caries in rats fed three types of diets with and without Lauricidin. *Microbios Lett.* **12**(45), 7-13 (1979).

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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