# **PRODUCT** INFORMATION



1-Myristoyl-rac-glycerol

Item No. 28173

CAS Registry No.: Formal Name:	589-68-4 tetradecanoic acid, 2,3-dihydroxypropyl ester	
Synonyms:	MG(14:0/0:0/0:0), 1-Monomyristin	
MF:	C <sub>17</sub> H <sub>34</sub> O <sub>4</sub>	
FW:	302.5	HO
Purity:	≥98%	OH
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-Myristoyl-rac-glycerol is supplied as a solid. A stock solution may be made by dissolving the 1-myristoyl-rac-glycerol in the solvent of choice, which should be purged with an inert gas. 1-Myristoyl-rac-glycerol is soluble in organic solvents such as ethanol and dimethyl formamide. The solubility of 1-myristoyl-rac-glycerol in these solvents is approximately 15 mg/ml.

## Description

1-Myristoyl-rac-glycerol is a monoacylglycerol that contains myristic acid (Item No. 13351) at the sn-1 position. It is active against H. pylori with a 50% bactericidal concentration (BC<sub>50</sub>) value of 0.3 mM.<sup>1</sup> 1-Myristoyl-*rac*-glycerol is cytotoxic to A498, PaCa-2, and PC3 cancer cells (EC<sub>50</sub>s = 3.58, 1.87, and 8.84  $\mu$ g/ml, respectively).<sup>2</sup> It has been found in saw palmetto berries.

## References

- 1. Sun, Q.C., O'Conner, C.J., and Roberton, A.M. Antibacterial actions of fatty acids and monoglycerides against Helicobacter pylori. FEMS Immunol. Med. Microbiol. 36(1-2), 9-17 (2003).
- 2. Shimada, H., Tyler, V.E., and McLaughlin, J.L. Biologically active acylglycerides from the berries of saw-palmetto (Serenoa repens). J. Nat. Prod. 60(4), 417-418 (1997).

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

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