# **PRODUCT** INFORMATION



**DMG-PEG(2000)** 

Item No. 33945

CAS Registry No.: Formal Name:	1397695-86-1 α-[(2R)-2,3- <i>bis</i> [(1-oxotetradecyl)oxy]propyl]-	
	ω-methoxy-poly(oxy-1,2-ethanediyl)	
Synonyms:	1,2-Dimyristoyl- <i>rac</i> -glycero-3- methoxypolyethylene glycol-2000	
MF:	$(C_2H_4O)_nC_{32}H_{62}O_5$	
Purity:	≥98%	$\circ$ $\Box$
Supplied as:	A crystalline solid	
Storage:	-20°C	
Stability:	≥2 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

# Laboratory Procedures

DMG-PEG(2000) is supplied as a crystalline solid. A stock solution may be made by dissolving the DMG-PEG(2000) in the solvent of choice, which should be purged with an inert gas. DMG-PEG(2000) is soluble in organic solvents such as ethanol and dimethyl formamide. The solubility of DMG-PEG(2000) in these solvents is approximately 1 mg/ml. DMG-PEG(2000) is also slightly soluble in DMSO.

## Description

DMG-PEG(2000) is a lipid excipient that has been used in combination with other lipids in the formation of lipid nanoparticles.<sup>1</sup> Administration of fumarylacetoacetate hydrolase (FAH) mRNA in DMG-PEG(2000)-containing lipid nanoparticles increases survival in a mouse model of hereditary tyrosinemia type 1 (HT-1). Formulations containing DMG-PEG(2000) have been used in the development of lipid nanoparticles for the delivery of mRNA-based vaccines.

# Reference

1. Cheng, Q., Wei, T., Jia, Y., et al. Dendrimer-based lipid nanoparticles deliver therapeutic FAH mRNA to normalize liver function and extend survival in a mouse model of hepatorenal tyrosinemia type I. Adv. Mater. 30(52), e1805308 (2018).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

### SAFFTY 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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