# **PRODUCT** INFORMATION



**HPA-12** 

Item No. 28350

CAS Registry No.:	383418-30-2	
Formal Name:	N-[(1R,3S)-3-hydroxy-1-	~ ~
	(hydroxymethyl)-3-phenylpropyl]- dodecanamide	0 11
Synonym:	(1R,3S)-HPA-12	OH N
MF:	C <sub>22</sub> H <sub>37</sub> NO <sub>3</sub>	
FW:	363.5	UH
Purity:	≥98%	
Supplied as:	A solid	
Storage:	-20°C	$\sim$
Stability:	≥4 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

# Laboratory Procedures

HPA-12 is supplied as a solid. A stock solution may be made by dissolving the HPA-12 in the solvent of choice, which should be purged with an inert gas. HPA-12 is soluble in organic solvents such as DMSO and chloroform.

# Description

HPA-12 is a ceramide analog and inhibitor of ceramide transfer protein (CERT).<sup>1,2</sup> It inhibits binding of a ceramide probe to the isolated steroidogenic acute regulatory protein-related lipid transfer (START) domain of CERT with an EC<sub>50</sub> value of 4  $\mu$ M in a TR-FRET assay.<sup>2</sup> HPA-12 (2.5  $\mu$ M) inhibits conversion of the fluorescent ceramide analog C5-DMB-Cer to C5-DMB-sphingomyelin in CHO and HeLa cells.<sup>1</sup> It also inhibits sphingomyelin synthesis in wild-type, but not ATP-dependent ceramide transport-deficient, CHO cells when used at a concentration of  $1 \mu M$ .

# References

- 1. Yasuda, S., Kitagawa, H., Ueno, M., et al. A novel inhibitor of ceramide trafficking from the endoplasmic reticulum to the site of sphingomyelin synthesis. J. Biol. Chem. 276(47), 43994-44002 (2001).
- 2. Santos, C., Fluery, L., Rodriguez, F., et al. The CERT antagonist HPA-12: First practical synthesis and individual binding evaluation of the four stereoisomers. Bioorg. Med. Chem. 23(9), 2004-2009 (2015).

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.

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, 12/01/2022

# 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