# **PRODUCT** INFORMATION



## **ARN14988**

Item No. 24284

CAS Registry No.:	1502027-70-4	
Formal Name:	5-chloro-3-[(hexylamino)carbonyl]-3,6-dihydro-	
	2,6-dioxo-1(2H)-pyrimidinecarboxylic acid,	
	2-methylpropyl ester	
MF:	C <sub>16</sub> H <sub>24</sub> ClN <sub>3</sub> O <sub>5</sub>	
FW:	373.8	0 N 0
Purity:	≥98%	
UV/Vis.:	λ <sub>max</sub> : 216, 269 nm	
Supplied as:	A crystalline solid	
Storage:	-20°C	0
Stability:	≥4 years	

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

#### Laboratory Procedures

ARN14988 is supplied as a crystalline solid. A stock solution may be made by dissolving the ARN14988 in the solvent of choice, which should be purged with an inert gas. ARN14988 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of ARN14988 in these solvents is approximately 30 mg/ml. ARN14988 is also slightly soluble in ethanol.

ARN14988 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ARN14988 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. ARN14988 has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

ARN14988 is a potent inhibitor of acid ceramidase ( $IC_{50}$  = 12.8 nM for the human enzyme).<sup>1</sup> It inhibits acid ceramidase activity and increases levels of C16 dihydro ceramide (Item No. 24369) and C16 ceramide (Item No. 10681) in A375, G361, M14, MeWo, MNT-1, and SK-MEL-28 melanoma cells. ARN14988 also reduces growth of A375 and G361 melanoma cells (EC<sub>50</sub>s = 41.8 and 67.7  $\mu$ M, respectively).

#### Reference

1. Realini, N., Palese, F., Pizzirani, D., et al. Acid ceramidase in melanoma: Expression, localization, and effects of pharmacological inhibition. J. Biol. Chem. 291(5), 2422-2434 (2016).

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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