# PRODUCT INFORMATION



## **ARN14974**

Item No. 17119

CAS Registry No.: 1644158-57-5

Formal Name: 6-(4-fluorophenyl)-2-oxo-

N-(4-phenylbutyl)-3(2H)-

benzoxazolecarboxamide

Synonym: Acid Ceramidase Inhibitor 17a

MF: C24H21FN2O3

FW: 404.4 ≥95% **Purity:** 

UV/Vis.:  $\lambda_{max}$ : 256 nm Supplied as: A crystalline solid

-20°C Storage: Stability: ≥4 years

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

# **Laboratory Procedures**

ARN14974 is supplied as a crystalline solid. A stock solution may be made by dissolving the ARN14974 in the solvent of choice. ARN14974 is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of ARN14974 in these solvents is approximately 2 mg/ml.

## Description

ARN14974 is a benzoxazolone carboxamide inhibitor of acid ceramidase ( $IC_{50}$  = 79 nM).<sup>1</sup> It inhibits acid ceramidase activity, reduces levels of sphingosine and dihydroceramide, and increases levels of ceramide in SW403 adenocarcinoma cells and RAW 264.7 murine macrophages when used at concentrations ranging from 0.1 to 20 mM. In vivo, ARN14974 (10 mg/kg, i.v.) reduces acid ceramidase activity in multiple organs, including brain, liver, heart, lungs, and kidney, and increases pulmonary ceramide levels in mice.

## Reference

1. Pizzirani, D., Bach, A., Realini, N., et al. Benzoxazolone carboxamides: Potent and systemically active inhibitors of intracellular acid ceramidase. Angew. Chem. Int. Ed. Engl. 54(2), 485-489 (2014).

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

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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## **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