

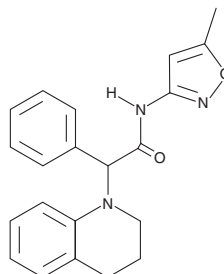
# PRODUCT INFORMATION



## CIM0216

Item No. 27684

**CAS Registry No.:** 1031496-06-6  
**Formal Name:** 3,4-dihydro-N-(5-methyl-3-isoxazolyl)- $\alpha$ -phenyl-1(2H)-quinolineacetamide  
**MF:** C<sub>21</sub>H<sub>21</sub>N<sub>3</sub>O<sub>2</sub>  
**FW:** 347.4  
**Purity:**  $\geq 95\%$   
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:**  $\geq 4$  years



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

### Laboratory Procedures

CIM0216 is supplied as a solid. A stock solution may be made by dissolving the CIM0216 in the solvent of choice, which should be purged with an inert gas. CIM0216 is slightly soluble in methanol and DMSO.

### Description

CIM0216 is a transient receptor potential melastatin 3 (TRPM3) activator. It induces inward and outward rectifying currents in TRPM3-expressing HEK293 cells voltage-clamped at  $\pm 80$  mV when used at a concentration of  $1 \mu\text{M}$ .<sup>1</sup> CIM0216 is selective for TRPM3 over TRPM1, TRPM4, TRPM6, and TRPM7 in HEK293 cells expressing the human channels, but does activate TRPA1 by 15% in CHO cells expressing mouse TRPA1 at  $10 \mu\text{M}$ . CIM0216 also inhibits ADP-ribose-induced TRPM2, calcium-induced TRPM5, and methanol-induced TRPM8 activation by 17, 34, and 61%, respectively, in HEK293 cells expressing the human channels at  $10 \mu\text{M}$ . It stimulates insulin and calcitonin gene-related peptide (CGRP) release in isolated mouse pancreatic islets and skin nerve terminals, respectively, when used at concentrations ranging from 5 to  $100 \mu\text{M}$ .<sup>1</sup> CIM0216 ( $20 \mu\text{M}$ ) induces activation of the TRPM3 signal transduction transcription factor AP-1 and its subunits, c-Jun and c-fos, in HEK293 cell reporter assays.<sup>2</sup>

### References

1. Held, K., Kichko, T., De Clercq, K., *et al.* Activation of TRPM3 by a potent synthetic ligand reveals a role in peptide release. *Proc. Natl. Acad. Sci. USA* **112(11)**, E1363-E1372 (2015).
2. Rubil, S. and Thiel, G. Activation of gene transcription via CIM0216, a synthetic ligand of transient receptor potential melastatin-3 (TRPM3) channels. *Channels (Austin)* **11(1)**, 79-83 (2017).

#### 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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#### 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