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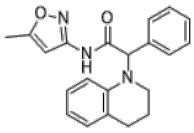
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	CIM0216
Cat. No.	:	PC-24729
CAS No.	:	1031496-06-6
Molecular Formula	:	$C_{21}H_{21}N_3O_2$
Molecular Weight	:	347.42
Target	:	TRP Channel
Solubility	:	10 mM in DMSO



CAS: 1031496-06-6

Biological Activity

CIM0216 is a potent, selective synthetic TRPM3 activator / agonist, evokes robust increases in intracellular Ca2+ concentration in HEK-TRPM3 cells with EC50 of 0.77 uM.
CIM0216 exceeds the potency and apparent affinity of canonical TRPM3 agonist, pregnenolone sulfate (PS) (EC50=3.0 uM).
CIM0216 (10 uM) has no stimulating/blocking effect on TRPM1, TRPM4, TRPM6, or TRPM7 currents, and weak activity against TRPM2 (16.6% block) and TRPM5 (33.5% block).
CIM0216 modualtes PS-induced TRPM3 currents with EC50 of 42 nM in HEK-TRPM3 cells.
CIM0216 evoked robust calcium influx in TRPM3-expressing somatosensory neurons, and intradermal injection of the compound induced a TRPM3-dependent nocifensive behavior.
CIM0216 elicited the release of the peptides calcitonin gene-related peptide (CGRP) from sensory nerve terminals and insulin from isolated pancreatic islets in a TRPM3-dependent manner.

References

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Rubil S, et al. Channels (Austin). 2017 Jan 2;11(1):79-83.

Vangeel L, et al. Br J Pharmacol. 2020 Jun;177(12):2683-2695.

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