Product Datasheet

CIM0216

Catalog No. **BP-06760** · CAS **1031496-06-6** · Form **free base** · Physical state **solid** · Color **White to yellow** · Version **1.0** · Revision **2026-11-16**

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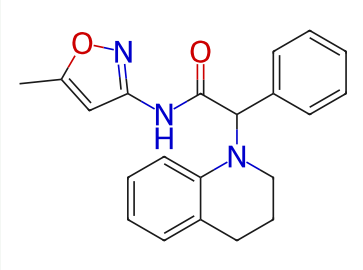
Target	Research area
TRP Channel	**Neurological Disease**

Molecular formula	$C_{21}H_{21}N_3O_2$
Molecular weight	**347.4103**

STRUCTURE



DESCRIPTION

CIM0216, a synthetic TRPM3 ligand, acts as a potent and selective agonist of TRPM3. CIM0216 exhibits selectivity for TRPM3 over TRPM1, TRPM2 and TRPM4-8. CIM0216 acts in a TRPM3-dependent manner to induce pain and evoke neuropeptide release from sensory nerve terminals in vitro. CIM0216 is a powerful tool for studies of the physiological functions of TRPM3, and can be used for neurogenic inflammation research .

BIOLOGICAL ACTIVITY

In Vitro

CIM0216 elicits a dose-dependent Ca2+ response [pEC50=0.77±0.1 μM] in HEK-TRPM3 cells, which is not observed in nontransfected HEK293 cells. CIM0216 induces a robust increase in intracellular Ca2+ concentration (1,145±26 nM) in single-cell FURA2-ratiometric Ca2+ imaging in HEK-TRPM3 cells. These responses are not observed in nontransfected HEK cells or in the absence of extracellular Ca2+[1].

CIM0216 (10 μM) has no stimulating/blocking effect on TRPM1, TRPM4, TRPM6, or TRPM7 currents; however, a small blocking effect of CIM0216 is observed after activation of TRPM2 (16.6% block) and TRPM5 (33.5% block). CIM0216 also has no detectable effect on human TRPV1 and TRPM8 channel activation[1].

SOLUBILITY

soluble in DMSO

REFERENCES

[1]. Katharina Held, et al. Activation of TRPM3 by a potent synthetic ligand reveals a role in peptide release. Proc Natl Acad Sci U S A. 2015 Mar 17;112(11):E1363-72.

Lot CoA and SDS are separate documents.