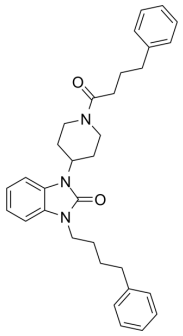
Cav 3.2 inhibitor 3

Cat. No.:	HY-151452
CAS No.:	2878598-69-5
Molecular Formula:	$C_{32}H_{37}N_3O_2$
Molecular Weight:	495.66
Target:	Calcium Channel
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Cav 3.2 inhibitor 3 (Compound 4) is a potent $Ca_V3.2$ T-type Ca^{2+} channel inhibitor with an IC_{50} of 0.1534 μM, and has little binding affinity to D_2 receptors[1].
IC_{50} & Target	$Ca_V3.2$ 0.1534 μM (IC_{50})
In Vivo	Cav 3.2 inhibitor 3 (Compound 4) (1-10 mg/kg; i.p.; once) potently suppresses T-channel-dependent somatic and visceral pain in mice[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	C57BL/6J mice, $Ca_V3.2$-dependent somatic and visceral pain model[1]
Dosage:	1, 3 and 10 mg/kg
Administration:	Intraperitoneal administration, once
Result:	Reduced the mechanical allodynia in the hindpaw and colonic pain/referred hyperalgesia following i.pl. and i.col. administrations of Na_2S, a donor of H_2S, respectively. Suppressed the i.pl. Na_2S-induced paw allodynia in a dose-dependent manner, and the maximally effective doses were roughly estimated at 10 mg/kg.

REFERENCES

[1]. Kasanami Y, et al. Discovery of pimozide derivatives as novel T-type calcium channel inhibitors with little binding affinity to dopamine D2 receptors for treatment of somatic and visceral pain. Eur J Med Chem. 2022 Aug 27;243:114716.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA