Calindol hydrochloride

Cat. No.: HY-122819

CAS No.: 729610-18-8

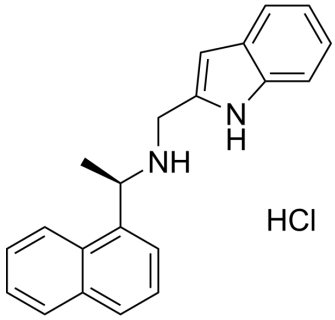
Molecular Formula: $C_{21}H_{21}ClN_2$

Molecular Weight: 336.86

Target: CaSR

Pathway: GPCR/G Protein

Storage: 4°C, sealed storage, away from moisture
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (296.86 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.9686 mL	14.8430 mL	29.6859 mL
	5 mM	0.5937 mL	2.9686 mL	5.9372 mL
	10 mM	0.2969 mL	1.4843 mL	2.9686 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Calindol hydrochloride is a positive allosteric modulator (PAM) of calcimimetic calcium-sensing receptor (CaSR) with an EC_{50} of 132 nM[1].

In Vitro

In the presence of 2mM Ca^{2+}, Calindol stimulates phosphatidylinositol (PI) accumulation with an EC_{50} of 1.0 μM or 0.31 μM in cells expressing the rat or the human CaSR, respectively[2].
In wire myography studies, Calindol (1-10 μM) inhibits Methoxamine- and KCl-induced pre-contracted tone, and inhibits whole-cell voltage-gated Ca^{2+} channel (VGCC) currents in rabbit mesenteric arteries[3].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Lionel Kiefer, et al. Design and synthesis of calindol derivatives as potent and selective calcium sensing receptor agonists. Bioorg Med Chem. 2016 Feb 15;24(4):554-69.

[2]. Albane Kessler, et al. N2-benzyl-N1-(1-(1-naphthyl)ethyl)-3-phenylpropane-1,2-diamines and conformationally restrained indole analogues: development of calindol as a new calcimimetic acting at the calcium sensing receptor. Bioorg Med Chem Lett. 2004 Jun 21;14(12):3345-9.

[3]. Harry Z E Greenberg, et al. The calcilytics Calhex-231 and NPS 2143 and the calcimimetic Calindol reduce vascular reactivity via inhibition of voltage-gated Ca2+ channels. Eur J Pharmacol. 2016 Nov 15;791:659-668.

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