M4 mAChR agonist-1

Cat. No.: HY-147028

CAS No.: 785705-53-5

Molecular Formula: $C_{14}H_{18}N_4OS$

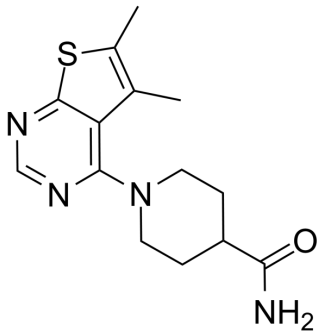
Molecular Weight: 290.38

Target: mAChR

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: 4°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 20 mg/mL (68.88 mM; ultrasonic and warming and adjust pH to 3 with HCl and heat to 70°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.4438 mL	17.2188 mL	34.4376 mL
	5 mM	0.6888 mL	3.4438 mL	6.8875 mL
	10 mM	0.3444 mL	1.7219 mL	3.4438 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 2.08 mg/mL (7.16 mM); Suspended solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

M4 mAChR agonist-1 (compound 10a) is a potent M4 mAChR agonist with an EC_{50} >10 μM for human M4[1].

IC_{50} & Target

EC_{50}: >10 μM (human M4)[1]

REFERENCES

[1]. Wood MR, et al. Discovery and optimization of a novel series of highly CNS penetrant M4 PAMs based on a 5,6-dimethyl-4-(piperidin-1-yl)thieno[2,3-d]pyrimidine core. Bioorg Med Chem Lett. 2016;26(13):3029-3033.

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