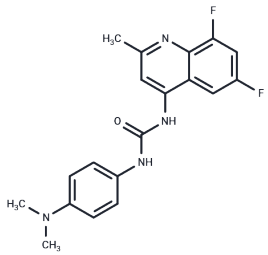
Data Sheet (Cat.No.T6658)

TargetMol

SB-408124

Chemical Properties



CAS No. : 288150-92-5

Formula: C19H18F2N4O

Molecular Weight: 356.37

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	SB408124 is a non-peptide antagonist for OX1 receptor with Ki of 57 nM and 27 nM in both whole cell and membrane, respectively, exhibits 50-fold selectivity over OX2 receptor.
Targets(IC50)	OX Receptor
In vitro	SB-408124 binds hypocretin type 1 receptor (HcrtR1) with pKi values of 7.57. Calcium mobilization studies shows that SB-408124 is a functional antagonist of the OX1 receptor with a affinity of approximately 50-fold selectivity over the OX2 receptor. [1] A recent study indicates that pretreatment of primary cultures of rat astrocytes with SB-401824 before Orexin A administration significantly reduced the stimulatory action of Orexin A on both basal and forskolin-acivated cAMP production. [2]
In vivo	SB-408124 (30 μg/10 μL, administered intracerebroventricularly) reduces Orexin-A-induced water intake in Wistar rats. Intracerebroventricular Orexin-A (30 μg/10 μL) inhibits vasopressin increase induced by histamine or 2.5% NaCl, and this effect is moderated by pretreatment with SB-408124. Intracerebroventricular pretreatment with SB-408124 (50 mM, 5 μL/h) prevents Bicuculline (BIC)-induced increases in endogenous glucose production (EGP). [3] [4]

Solubility Information

Solubility	DMSO: 62.5 mg/mL (175.38 mM),Sonication and heating are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8061 mL	14.0304 mL	28.0607 mL
5 mM	0.5612 mL	2.8061 mL	5.6121 mL
10 mM	0.2806 mL	1.403 mL	2.8061 mL
50 mM	0.0561 mL	0.2806 mL	0.5612 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Langmead CJ, et al, Br J Pharmacol, 2004, 141(2) , 340-346.
Woldan-Tambor A, et al, Pharmacol Rep, 2011, 63(3), 717-723.
Kis Gk, et al, Pflugers Arch, 2012, 463(4), 531-536
Yi CX, et al, Diabetes, 2009, 58(9), 11998-22005.