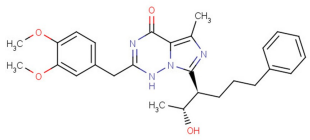
Data Sheet (Cat.No.T14507)

TargetMol
A DRUG SCREENING EXPERT

Bay 60-7550

Chemical Properties



CAS No.:	439083-90-6
Formula:	C27H32N4O4
Molecular Weight:	476.57
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Bay 60-7550 is an inhibitor of PDE2(Ki: 3.8 nM).
Targets(IC_{50})	PDE2: (ki) 3.8±0.2 nM
In vitro	Bay 60-7550 in the presence of NMDA (30 μM) results in further increases in cGMP compared with NMDA alone. Bay 60-7550 (1 μM) increases cGMP in the neuronal cultures compared with control [F(6,14)=12.97, p<0.05 for Bay 60-7550]. The NMDA receptor antagonist MK-801 (10 μM) blocks both Bay 60-7550+NMDA-induced elevation in cGMP in neuronal cultures[1]. Compared with untreated control cells, proliferation of PASMCs from IPAH patients is significantly reduced by BAY 60-7550 (1 μM)[2].
In vivo	The PDE2 inhibitors Bay 60-7550 (1 mg/kg) reverses restraint stress-induced alterations in behavior, resulting in increased percentages of open-arm entries and open-arm time compared with the vehicle + restraint stress condition. In nonstressed mice, Bay 60-7550 increases, in a dose-dependent manner, the number of head-dips and time spent head-dipping, compared with vehicle-treated mice; significant increases are observed at doses of 1 and 3 mg/kg[1]. In nonstressed mice, Bay 60-7550 produces a dose-dependent increase in percentages of open-arm entries and open-arm time compared with the vehicle-treated group; significant increases are observed at a dose of 3 mg/kg.

Solubility Information

Solubility	DMSO: 33.3 mg/mL (69.87 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.098 mL	10.492 mL	20.983 mL
5 mM	0.42 mL	2.098 mL	4.197 mL
10 mM	0.21 mL	1.049 mL	2.098 mL
50 mM	0.042 mL	0.21 mL	0.42 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Masood A, et al. Anxiolytic effects of phosphodiesterase-2 inhibitors associated with increased cGMP signaling. J Pharmacol Exp Ther. 2009 Nov;331(2):690-9.

2. Bubb KJ, et al. Inhibition of phosphodiesterase 2 augments cGMP and cAMP signaling to ameliorate pulmonary hypertension. Circulation. 2014 Aug 5;130(6):496-507.

Inhibitors · Natural Compounds · Compound Libraries

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