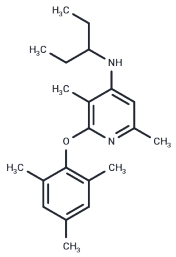
Data Sheet (Cat.No.T4329)

TargetMol

CP 376395

Chemical Properties



CAS No. : 175140-00-8

Formula: C21H30N2O

Molecular Weight: 326.48

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	CP 376395 (CP-316311) is an effective and specific Corticotropin-releasing factor 1 (CRF1) receptor antagonist.
Targets(IC50)	CRFR
In vitro	It is highly selective for the human CRF1 receptor subtype,and exhibits affinities against 40 neurotransmitter receptor and ion channels(>1 μM).
In vivo	Pretreatment with CP 376395 (ID50=17.8 mg/kg, p.o.) reverses the excitation of locus coeruleus neurons induced by icv CRF (3 μg) completely blocked the enhanced startle response, while pretreatment with CP 376395(10 mg/kg, p.o.) induced by icv CRF (1 μg) is partially blocked.
Kinase Assay	In supernatants from cells, which are incubated in OSS_128167 (100 μM) for 18 hours, TNF-a levels are measured .
Animal Research	Beagle dogs weighing between 8 and 15 kg are administered with CP 376395 hydrochloride salt (1.0 mg/kg) into the cephalic vein of the foreleg. Beagle dogs are treated with CP 376395(10 mg/mL) prepared in 0.1% methyl cellulose at pH 2 by oral.

Solubility Information

Solubility	H2O: < 0.1 mg/mL (insoluble), DMSO: 61.25 mg/mL (187.61 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 6.13 mg/mL (18.78 mM),Solution. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (12.25 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.063 mL	15.3149 mL	30.6297 mL
5 mM	0.6126 mL	3.063 mL	6.1259 mL
10 mM	0.3063 mL	1.5315 mL	3.063 mL
50 mM	0.0613 mL	0.3063 mL	0.6126 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Chen YL, et al. 2-aryloxy-4-alkylaminopyridines: discovery of novel corticotropin-releasing factor 1 antagonists. J Med Chem. 2008 Mar 13;51(5):1385-92.