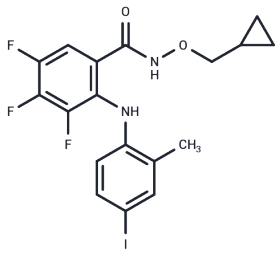
Data Sheet (Cat.No.T21980)

PD 198306

Chemical Properties



CAS No. : 212631-61-3

Formula: C18H16F3IN2O2

Molecular Weight: 476.23

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	PD 198306 is a selective inhibitor of MAPK/ERK-kinase (MEK) with antihyperalgesic effects. PD 198306 reduces the Streptozocin-induced increase in the level of active ERK1.
Targets(IC50)	MEK
In vitro	PD 198306 (10μM) reduces Tha-Crimson replication by 30% at 18h and 50% at 36h. PD 198306 (10 μM) significantly inhibits Tha-GFP replication by 25%[1].
In vivo	In male Sprague Dawley rats bearing neuropathic pain, PD 198306 (1-30 μg/10 μL; i.t.) dose-dependently blocks static allodynia in both the chronic constriction injury and the streptozocin models[2].

Solubility Information

Solubility	DMSO: 45 mg/mL (94.49 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 5 mg/mL (10.5 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	2.0998 mL	10.4991 mL	20.9983 mL
5 mM	0.420 mL	2.0998 mL	4.1997 mL
10 mM	0.210 mL	1.0499 mL	2.0998 mL
50 mM	0.042 mL	0.210 mL	0.420 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

Benoit Besson, et al. Kinome-Wide RNA Interference Screening Identifies Mitogen-Activated Protein Kinases and Phosphatidylinositol Metabolism as Key Factors for Rabies Virus Infection. mSphere. 2019 May 22;4(3):e00047-19.
A Ciruela, et al. Identification of MEK1 as a novel target for the treatment of neuropathic pain. Br J Pharmacol. 2003 Mar;138(5):751-6.