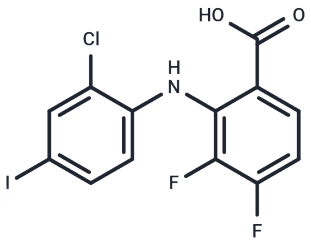
Data Sheet (Cat.No.T9321)

TargetMol

zapnometinib

Chemical Properties



CAS No. : 303175-44-2

Formula: C13H7ClF2INO2

Molecular Weight: 409.55

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	Zapnometinib (ATR-002) is a MEK inhibitor.
Targets(IC50)	MEK,Antibacterial,Influenza Virus
In vitro	Zapnometinib inhibits MEK, with IC50s of 30.96 nM, 357 nM, and 15 nM in cell free kinase assay, A549, MDCK cells and human PBMCs[1].Zapnometinib reduces the viral titers of the IV H1N1pdm09, H3N2[1].
In vivo	Zapnometinib exhibits AUC values of 860.02 and 1953.68 μg?h/mL in mice by i.v. or oral route, respectively[1].Zapnometinib reduces the lung virus titers and enhances survival of mice after lethal H1N1pdm09 infection[1].

Solubility Information

Solubility	DMSO: 60 mg/mL (146.5 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: 2 mg/mL (4.88 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	2.4417 mL	12.2085 mL	24.417 mL
5 mM	0.4883 mL	2.4417 mL	4.8834 mL
10 mM	0.2442 mL	1.2209 mL	2.4417 mL
50 mM	0.0488 mL	0.2442 mL	0.4883 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

Laure M, et, al. Antiviral efficacy against influenza virus and pharmacokinetic analysis of a novel MEK-inhibitor, ATR-002, in cell culture and in the mouse model. Antiviral Res. 2020 Jun;178:104806