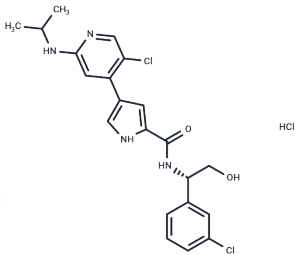
Data Sheet (Cat.No.T7005L)

TargetMol

Ulixertinib hydrochloride

Chemical Properties



CAS No. : 1956366-10-1

Formula: C21H23Cl3N4O2

Molecular Weight: 469.79

Storage: Keep away from moisture
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	Ulixertinib hydrochloride (Ulixertinib HCl) is an orally available, selective and potent ERK1/2 inhibitor with anticancer and antitumor activity that inhibits the NB cell cycle and promotes apoptosis, and may be used in the study of solid tumors.
Targets(IC50)	ERK
In vitro	Combined treatment with Ulixertinib hydrochloride and VS-5584 for 48 hours significantly induced cell death in human pancreatic adenocarcinoma (HPAC) cells from the PDAC cell lines BxPC-3, MIAPaCa-2 and CFPAC. [1]
In vivo	Ulixertinib hydrochloride potently inhibited neuroblastoma tumor growth and prolonged the overall survival of the treated mice in two different neuroblastoma mice models. [2]

Solubility Information

Solubility	H2O: < 0.1 mg/mL(insoluble) DMSO: 80 mg/mL (170.29 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: 3.3 mg/mL (7.02 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	2.1286 mL	10.6431 mL	21.2861 mL
5 mM	0.4257 mL	2.1286 mL	4.2572 mL
10 mM	0.2129 mL	1.0643 mL	2.1286 mL
50 mM	0.0426 mL	0.2129 mL	0.4257 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

Ning C, et al. Targeting ERK enhances the cytotoxic effect of the novel PI3K and mTOR dual inhibitor VS-5584 in preclinical models of pancreatic cancer. Oncotarget. 2017 Jul 4;8(27):44295-44311.
Yu Y, et al. ERK Inhibitor Ulixertinib Inhibits High-Risk Neuroblastoma Growth In Vitro and In Vivo. Cancers (Basel). 2022 Nov 10;14(22):5534.
Kumar R, et al. Determination of ulixertinib in mice plasma by LC-MS/MS and its application to a pharmacokinetic study in mice. J Pharm Biomed Anal. 2016 Jun 5;125:140-4.

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