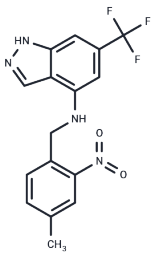
Data Sheet (Cat.No.T61202)

TargetMol

TDO-IN-1

Chemical Properties



CAS No. : 2490672-92-7

Formula: C16H13F3N4O2

Molecular Weight: 350.3

Storage: Store at low temperature
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	TDO-IN-1 is an orally active, potent, and selective inhibitor of tryptophan 2,3-dioxygenase (TDO), inhibiting indoleamine-2,3-dioxygenase, with antitumor activity that reverses local immune tolerance in tumor tissues.
Targets(IC50)	Others,IDO,Indoleamine 2,3-Dioxygenase (IDO)
In vitro	TDO-IN-1 (HT-28) exhibits significant tumoricidal effects on various tumor lines at concentrations ranging from 0 to 100 μM over 24 hours, with IC50 values of 0.54 μM (HepG2), 5.08 μM (Hepa1-6), 1.34 μM (H22), 37.39 μM (B16), 3.43 μM (MOLM-13), and 7.25 μM (Jurkat)[1]. Additionally, TDO-IN-1 (0-100 μM; 24 h) shows minimal cytotoxicity against normal cells (HEK 293) at concentrations below 10 μM[1].
In vivo	Administered orally at a dose of 25 mg/kg once daily for 9 days, TDO-IN-1 (HT-28) enhances the efficacy of tumor immunotherapy in CT26 tumors expressing TDO. This treatment substantially inhibits the proliferation of CT26 tumors in mice[1].

Solubility Information

Solubility	DMSO: 60 mg/mL (171.28 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8547 mL	14.2735 mL	28.547 mL
5 mM	0.5709 mL	2.8547 mL	5.7094 mL
10 mM	0.2855 mL	1.4273 mL	2.8547 mL
50 mM	0.0571 mL	0.2855 mL	0.5709 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

Huo C, et al. 4,6-Disubstituted-1H-Indazole-4-Amine derivatives with immune-chemotherapy effect and in vivo antitumor activity. Eur J Med Chem. 2022 Nov 5;241:114625.