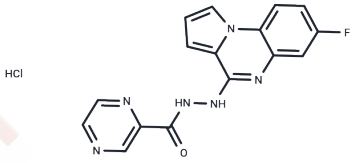
Data Sheet (Cat.No.T6207)

TargetMol

SC144

Chemical Properties



CAS No. : 895158-95-9

Formula: C16H11FN6O

Molecular Weight: 322.3

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	SC144 is an orally active small-molecule gp130 inhibitor.
Targets(IC50)	Apoptosis,Interleukin
In vitro	SC144 exhibits potent cytotoxicity against a panel of drug-sensitive and drug-resistant cancer cell lines. SC144 shows synergism with both 5-fluorouracil and oxaliplatin when co-treated in colorectal cancer HT29 cells. Pretreatment with SC144 in oxaliplatin-resistant HTOXAR3 cells is more effective than oxaliplatin pretreatment. In addition, the combination of SC144 and paclitaxel exhibited synergism in MDA-MB-435 cells with a schedule-dependent block in cell cycle. [1] SC144 treatment in vitro induces gp130 phosphorylation and deglycosylation, resulting in the downregulation of surface-bound gp130 and the abrogation of gp130-associated Stat3 activation. In addition, SC144 selectively inhibits the downstream signaling activation induced by gp130 substrates, including IL-6 and LIF. Protein expression regulated by the gp130/Stat3 axis in OVCAR-8 cells is also down-regulated after SC144 treatment, including Bcl-2, Bcl-XL, survivin, cyclin D1, MMP-7, gp130 and Ape1/Rel-1. [2]
In vivo	SC144 significantly inhibits tumor growth in a mouse xenograft model of human ovarian cancer via i.p. or p.o. administration. After SC144 treatment for two months, gp130, Bcl-2, Bcl-XL, MMP-7 and Ape1/Ref-1 protein levels are substantially decreased in the tumor site in the treatment group compared with the control group. [2] In an MDA-MB-435 mouse xenograft model, co-administration of SC144 and paclitaxel delays tumor growth in an SC144 dose-dependent manner. Evaluation of the pharmacokinetics of SC144 reveals that intraperitoneal administration of SC144 shows a two-compartmental pharmacokinetics elimination profile that is not observed in the oral dosing. [1]
Cell Research	MTT assay (Only for Reference)

Solubility Information

Solubility	H2O: < 1 mg/mL (insoluble or slightly soluble), DMSO: 15 mg/mL (46.54 mM),Sonication is recommended. Ethanol: < 1 mg/mL (insoluble or slightly soluble),

(< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.1027 mL	15.5135 mL	31.027 mL
5 mM	0.6205 mL	3.1027 mL	6.2054 mL
10 mM	0.3103 mL	1.5513 mL	3.1027 mL
50 mM	0.0621 mL	0.3103 mL	0.6205 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.

Reference

Oshima T, et al. Anticancer Drugs, 2009, 20(5), 312-320.
Guo C, Dong J, Ma Y, et al. LIF and bFGF enhanced chicken primordial follicle activation by Wnt/β-catenin pathway. Theriogenology. 2021
Zhou S, Li Z, Li X, et al.Crosstalk between endothelial cells and dermal papilla entails hair regeneration and angiogenesis during aging.Journal of Advanced Research.2024
Xu S, et al. Mol Cancer Ther, 2013, 12(6), 937-949.