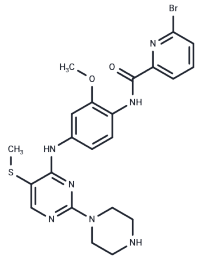
Data Sheet (Cat.No.T86768)

TargetMol

JH530

Chemical Properties



CAS No. : 2928616-74-2

Formula: C22H24BrN7O2S

Molecular Weight: 530.44

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	JH530 is a potent methuosis inducer that suppresses the proliferation of triple-negative breast cancer (TNBC) cells by inducing complete intracellular vacuolization. It exhibits anti-tumor properties and is valuable for cancer research [1].
Targets(IC50)	Others,Ras
In vitro	JH530 (Compound 5c) administered at concentrations of 1 μM or 2 μM for 24 hours induces significant morphological changes in HCC1806 cells characterized by intracellular vacuole accumulation but has minimal effects on the morphology and viability of 184B5 cells [1]. At doses of 0.5, 1.0, and 1.5 μM, JH530 prompts cell death through vacuolation after a 24-hour exposure [1]. Additionally, treatment with 1 μM JH530 effectively suppresses in vitro proliferation of TNBC cells [1], while a 1.5 μM concentration increases the expression of Rab7 and Lamp1 in HCC1806 and MDA-MB-468 cells [1]. Cell proliferation assays demonstrate significant anti-proliferative activity in vitro in HCC1806, MDA-MB-468, and HCC1937 TNBC cell lines, with IC50 values of 0.70 μM, 0.92 μM, and 1.03 μM respectively, after a 24-hour incubation at 1 μM [1]. Cell viability assays reveal distinct morphological changes at 1 μM in HCC1806 cells, marked by intracellular vacuoles, while effects on 184B5 cell morphology and viability are negligible [1]. Western Blot analysis shows a dose-dependent increase in Rab7 and Lamp1 expression, leading to cell death through vacuole formation [1]. Immunofluorescence studies confirm the induction of both Rab7 and Lamp1 in HCC1806 and MDA-MB-468 cells at 1.5 μM, resulting in substantial vacuole accumulation within most cells after 24 hours [1].
In vivo	JH530 (compound 5c), administered via intraperitoneal injection at doses of 2.5 mg/kg or 5.0 mg/kg every two days for two weeks, significantly reduced tumor weight in the HCC1806 cell xenograft mouse model at 2.5 mg/kg and showed even more pronounced tumor suppression at 5 mg/kg [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8852 mL	9.4261 mL	18.8523 mL
5 mM	0.377 mL	1.8852 mL	3.7705 mL
10 mM	0.1885 mL	0.9426 mL	1.8852 mL
50 mM	0.0377 mL	0.1885 mL	0.377 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.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481