Data Sheet (Cat.No.T61272)

TargetMol

EGFR/HER2-IN-7

Chemical Properties

CAS No. :

Formula: C19H21N3O2S

Molecular Weight: 355.45

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	EGFR/HER2-IN-7 is a highly selective and potent anticancer compound designed to target MCF-7 breast cancer cells by functioning as a dual inhibitor of EGFR/HER2 kinases and DHFR (dihydrofolate reductase), with IC50 values of 0.18 μM for EGFR, 0.146 μM for HER2, and 0.907 μM for DHFR [1].
Targets(IC50)	EGFR,Others
In vitro	EGFR/HER2-IN-7 (compound 27) shows significant cytotoxicity with an IC50 of 10.81 μM against MCF-7 breast cancer cells and demonstrates notable anti-breast cancer properties with an IC50 of 8.29 μM after 72 hours. A Cell Viability Assay revealed that EGFR/HER2-IN-7, at concentrations up to 1 mM and a 72-hour incubation period, inhibited the growth of various cancer cell lines, including HepG2 hepatocellular carcinoma, MCF-7 breast cancer, HCT-116 colorectal carcinoma, PC-3 prostate, and HeLa cervical epithelioid carcinoma, with IC50 values of 10.81 μM, 8.29 μM, 13.78 μM, 16.63 μM, and 7.63 μM, respectively. Additionally, a Cell Cytotoxicity Assay using the normal healthy cell line WI-38 (fetal lung fibroblast cells) demonstrated low cytotoxicity and high IC50 values, indicating selective action towards cancer cells over healthy cells.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8133 mL	14.0667 mL	28.1334 mL
5 mM	0.5627 mL	2.8133 mL	5.6267 mL
10 mM	0.2813 mL	1.4067 mL	2.8133 mL
50 mM	0.0563 mL	0.2813 mL	0.5627 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.

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