Data Sheet (Cat.No.T70227)

TargetMol

BPIQ-I

Chemical Properties

CAS No. : 174709-30-9

Formula: C16H12BrN5

Molecular Weight: 354.20

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	BPIQ-I (PD 159121) is a potent and ATP-competitive EGFR tyrosine kinase inhibitor. BPIQ-I (PD 159121) shows anti-proliferative activity in EGFR-associated signaling models. BPIQ-I (PD 159121) is used in kinase inhibition research to study ATP-binding competition, EGFR pathway modulation, and downstream proliferative signaling regulation in cancer cell line experimental systems.
Targets(IC50)	EGFR
In vitro	Methods: Tumor cells were incubated with 0–50 μM BPIQ-I for 3 days to evaluate its in vitro antiproliferative activity. The mechanism underlying erbB RTK modulation was further explored at 10 nM. Results: 1.The antiproliferative EC_{50} values of BPIQ-I were as follows: >50 μM for A-431, 30 μM for MDA-MB-468, >50 μM for U-87, 6.5 μM for SKOV-3, and >50 μM for MDA-MB-231 [1]. 2.At 10 nM, BPIQ-I suppressed erbB RTKs via ATP-competitive binding and abolished cellular CO_2 sensitivity [2].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8233 mL	14.1163 mL	28.2326 mL
5 mM	0.5647 mL	2.8233 mL	5.6465 mL
10 mM	0.2823 mL	1.4116 mL	2.8233 mL
50 mM	0.0565 mL	0.2823 mL	0.5647 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

Rae JM, et al. Evaluation of novel epidermal growth factor receptor tyrosine kinase inhibitors. Breast Cancer Res Treat. 2004 Jan;83(2):99-107.

Zhou Y, et al. Role of a tyrosine kinase in the CO2-induced stimulation of HCO3- reabsorption by rabbit S2 proximal tubules. Am J Physiol Renal Physiol. 2006 Aug;291(2):F358-67.

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