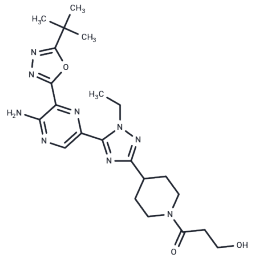
Data Sheet (Cat.No.T6774)

TargetMol

AZD-8835

Chemical Properties



CAS No. : 1620576-64-8

Formula: C22H31N9O3

Molecular Weight: 469.54

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	AZD-8835 is a mixed inhibitor of PI3Kα/δ (IC50: 6.2/5.7 nM), also with selectivity against PI3Kβ/γ (IC50: 431/90 nM).
Targets(IC50)	PI3K
In vitro	AZD8835 is a potent inhibitor of PI3Kα (wild type, E545K and H1047R mutations) and PI3Kδ with excellent selectivity vs. PI3Kβ, PI3Kγ and an excellent general kinase selectivity. AZD8835 is a potent inhibitor of p-Akt in cells sensitive to PI3Kα inhibition (IC50=0.057 μM in PIK3CA mutant human breast ductal carcinoma BT474 cell line) and in cells sensitive to PI3Kδ inhibition (IC50=0.049 μM in JeKo-1 B cell line), but not to cells sensitive to PI3Kβ inhibition (IC50=3.5 μM in PTEN null breast adenocarcinoma MDA-MB-468 cell line) or PI3Kγ inhibition (IC50=0.53 μM in monocytic RAW264 cell line)[2].
In vivo	AZD8835 has antitumor efficacy in corresponding breast cancer xenograft models when dosed continuously and displays high metabolic stability and suitable physical properties for oral administration[1][2].
Cell Research	BT474, MCF7, or T47D cells are seeded in 384-well plates at a density of 500 to 2,000 cells per well and incubated overnight. Cells are dosed with compound(s) and cell confluency is measured at 4-hour intervals over several days.(Only for Reference)

Solubility Information

Solubility	H2O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: < 1 mg/mL (insoluble or slightly soluble), DMSO: 86 mg/mL (183.16 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween-80+45% Saline: 1 mg/mL (2.13 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1297 mL	10.6487 mL	21.2974 mL
5 mM	0.4259 mL	2.1297 mL	4.2595 mL
10 mM	0.213 mL	1.0649 mL	2.1297 mL
50 mM	0.0426 mL	0.213 mL	0.4259 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

Hudson K, et al. Mol Cancer Ther. 2016, 15(5):877-89.
Bernard Barlaam, et al. Bioorganic & Medicinal Chemistry Letters. 2015, 25(22):5155-5162.