

BAY1082439

Chemical Properties

CAS No. : 1375469-38-7

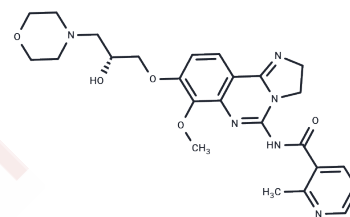
Formula: C₂₅H₃₀N₆O₅

Molecular Weight: 494.54

Store at low temperature

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	BAY1082439, an orally bioavailable, selective inhibitor of PI3K $\alpha/\beta/\delta$, demonstrates high efficacy in inhibiting the growth of Pten-null prostate cancer [1][2]. Additionally, BAY1082439 is effective against mutated forms of PIK3CA.
Targets(IC50)	Apoptosis,PI3K
In vitro	BAY1082439 is a highly selective PI3K α/α -balanced inhibitor. BAY1082439 (0.1-1 μ M; 72 hours) is more effective than PI3K α - and/or PI3K β -selective inhibitors in blocking PTEN-null prostate cancer cells[2]. BAY1082439 exhibits an IC50 ratio of 1:3 in biochemical assays of PI3K α (4.9 nM) vs. PI3K α (15.0 nM) and shows >1000-fold selectivity against mTOR kinase[1].
In vivo	BAY1082439 (75 mg/kg; p.o.; daily for 4 weeks) effectively prevents the progression of Pten-null prostate cancer[2].

Solubility Information

Solubility	DMSO: Slightly soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0221 mL	10.1104 mL	20.2208 mL
5 mM	0.4044 mL	2.0221 mL	4.0442 mL
10 mM	0.2022 mL	1.011 mL	2.0221 mL
50 mM	0.0404 mL	0.2022 mL	0.4044 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

Ningshu Liu, et al. Abstract 2799: BAY 1082439, a highly selective and balanced PI3K α / β inhibitor demonstrated potent activity in tumors with activated PI3K α and loss-of-function of PTEN. Abstract nr 2799. doi:1538-7445. AM2012-2799.

Yongkang Zou, et al. Co-Targeting the Cell Intrinsic and Microenvironment Pathways of Prostate Cancer by PI3K α / β / δ inhibitor BAY1082439. Mol Cancer Ther. 2018 Oct;17(10):2091-2099.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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