

BIM-46174

Chemical Properties

CAS No. : 195450-11-4

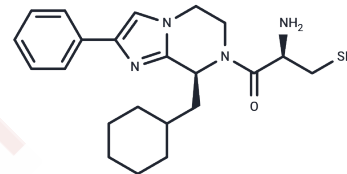
Formula: C₂₂H₃₀N₄O₅

Molecular Weight: 398.57

Keep away from moisture

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	BIM-46174 is a 5,6,7,8-tetrahydroimidazo [1,2-a] pyrazine derivative that inhibits the heterotrimeric Galpha/Gbetagamma protein complex and has anticancer activity, inhibiting the growth of a large number of human cancer cell lines, inducing caspase-3-dependent cancer cell apoptosis, and inducing poly (ADP-ribose) polymerase cleavage.
Targets(IC50)	Apoptosis
In vitro	METHODS: RAW-blue macrophages were pretreated with BIM-46174 (20 μM, 30 min) and then treated with 10 μg/mL imiquimod. Cell lysates from WT and KD cells were separated by SDS-PAGE, and the blots were probed with a phosphorylation-specific polyclonal rabbit antibody against NF-κBp65-Ser (P). RESULTS: BIM-46174 significantly blocked nucleic acid-induced TLR-7 and -9 MyD88 recruitment, NF-κB activation, and proinflammatory TNFα and MCP-1 cytokine responses. [3]

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.509 mL	12.5448 mL	25.0897 mL
5 mM	0.5018 mL	2.509 mL	5.0179 mL
10 mM	0.2509 mL	1.2545 mL	2.509 mL
50 mM	0.0502 mL	0.2509 mL	0.5018 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

Küppers J, et al. BIM-46174 fragments as potential ligands of G proteins. Medchemcomm. 2019 Aug 21;10(10):1838-1843.

Prévost GP, et al. Anticancer activity of BIM-46174, a new inhibitor of the heterotrimeric Galpha/Gbetagamma protein complex. Cancer Res. 2006 Sep 15;66(18):9227-34.

Abdulkhalek S, et al. Neu1 sialidase and matrix metalloproteinase-9 cross-talk regulates nucleic acid-induced endosomal TOLL-like receptor-7 and -9 activation, cellular signaling and pro-inflammatory responses. Cell Signal. 2013 Nov;25(11):2093-105.

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