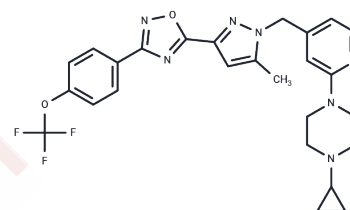


BAY 87-2243

Chemical Properties

CAS No. : 1227158-85-1
 Formula: C₂₆H₂₆F₃N₇O₂
 Molecular Weight: 525.53
 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	BAY 87-2243 is a potent and selective inhibitor of hypoxia-inducible factor-1 (HIF-1).
Targets(IC50)	Ferroptosis,HIF/HIF Prolyl-Hydroxylase,HIF
In vitro	BAY87-2243 (administered orally at 4 mg/kg) reduced tumor weight, HIF-1 α protein, and HIF-1 target gene expression levels in an H460 xenograft mouse model.
In vivo	In hypoxic lung cancer H460 cells, BAY 87-2243 inhibits the expression of HIF target genes and suppresses the accumulation of HIF-1 α protein. It impairs cell proliferation by interfering with mitochondrial function under glucose consumption. Additionally, BAY 87-2243 inhibits the reporter gene activity of HIF-1 and the expression of CA9 protein, with IC50 values of 0.7 nM and 2 nM, respectively.
Cell Research	To evaluate the cytotoxicity of BAY 87-2243, 2,000 cells of the respective cell lines are seeded in 96-well plates and cultured in the appropriate growth medium containing 10% FCS. BAY 87-2243 at various concentrations is added at 24 h after seeding for additional 48 h and cell viability is determined using Cell Titer Glow Assay.(Only for Reference)

Solubility Information

Solubility	DMSO: 9.2 mg/mL (17.51 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: 2 mg/mL (3.81 mM),Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9028 mL	9.5142 mL	19.0284 mL
5 mM	0.3806 mL	1.9028 mL	3.8057 mL
10 mM	0.1903 mL	0.9514 mL	1.9028 mL
50 mM	0.0381 mL	0.1903 mL	0.3806 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

Ellinghaus P, et al. Cancer Med. 2013, 2(5), 611-624.

Tian M, Liu W, Li X, et al. HIF-1 α promotes SARS-CoV-2 infection and aggravates inflammatory responses to COVID-19. Signal Transduction and Targeted Therapy. 2021, 6(1): 1-13.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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