

BIX-01294

Chemical Properties

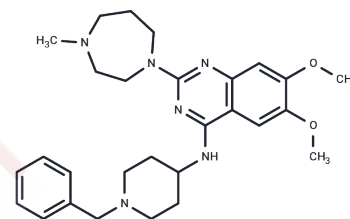
CAS No. : 935693-62-2

Formula: C₂₈H₃₈N₆O₂

Molecular Weight: 490.64

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	BIX-01294 is an G9a Histone Methyltransferase inhibitor(IC ₅₀ : 1.9 μM).
Targets(IC ₅₀)	Histone Methyltransferase,Autophagy
In vitro	BIX-01294 induced caspase-dependent apoptosis in human bladder cancer cells.?BIX-01294 stimulates endoplasmic reticulum stress (ER stress) and up-regulated expression of PMAIP1 through DDIT3 up-regulation.?Furthermore, down-regulation of the deubiquitinase USP9X by BIX-01294 results in downstream reduction of MCL1 expression, leading to apoptosis eventually[1].
Cell Research	On the first day, cells were seeded in 96 well plates.?Twenty-four hours later, BIX-01294 was added at the indicated concentrations in each well.?After treatment by BIX-01294 for another 24 h, we used 10% TCA to immobilize the cells and then evaluated the living cell numbers using the sulforhodamine B assay as previously described[1]

Solubility Information

Solubility	DMSO: 84.17 mg/mL (171.55 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: 3.3 mg/mL (6.73 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	2.0382 mL	10.1908 mL	20.3815 mL
5 mM	0.4076 mL	2.0382 mL	4.0763 mL
10 mM	0.2038 mL	1.0191 mL	2.0382 mL
50 mM	0.0408 mL	0.2038 mL	0.4076 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

Cui J , Sun W , Hao X , et al. EHMT2 inhibitor BIX-01294 induces apoptosis through PMAIP1-USP9X-MCL1 axis in human bladder cancer cells[J]. Cancer Cell International, 2015, 15(1):4.

Homon C A , O'Sullivan R , August E M , et al. Reversal of H3K9me2 by a small-molecule inhibitor for the G9a histone methyltransferase.[J]. Molecular Cell, 2007, 25(3):473-481.

Zhang Y, Xue W, Zhang W, et al. Histone methyltransferase G9a protects against acute liver injury through GSTP1 [J]. Cell Death & Differentiation. 2020, 27(4): 1243-1258.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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