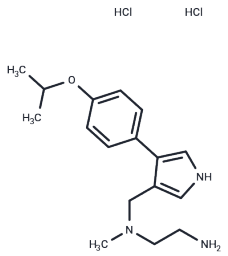
Data Sheet (Cat.No.T61338)

TargetMol

MS023 dihydrochloride

Chemical Properties



CAS No. : 1992047-64-9

Formula: C17H27Cl2N3O

Molecular Weight: 360.32

Storage: Store under nitrogen
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	MS023 dihydrochloride (MS023 2HCl) is a selective, cytosolic and highly potent inhibitor of human type I protein arginine methyltransferases (PRMTs) with antitumour activity, inhibits PRMT1, PRMT3, PRMT4, PRMT6, and PRMT8, and increases the proliferative capacity of isolated cultured MuSC. It can be used to study breast cancer.
Targets(IC50)	Histone Methyltransferase
In vitro	MS023 dihydrochloride (1-1000 nM) effectively and concentration-dependently reduces PRMT1 methyltransferase activity in MCF7 cells[1].
In vivo	In NOD-scid IL2Rgnull (NSG) mice bearing primary MLL-r ALL cells, combinatorial treatment with MS023 dihydrochloride (160 mg/kg, ip) and PKC412 (100 mg/kg, i.g.) for 4 weeks extended the survival of leukemic mice compared to single treatments[2].

Solubility Information

Solubility	H2O: 20 mg/mL (55.51 mM),Sonication is recommended. DMSO: 100 mg/mL (277.53 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7753 mL	13.8766 mL	27.7531 mL
5 mM	0.5551 mL	2.7753 mL	5.5506 mL
10 mM	0.2775 mL	1.3877 mL	2.7753 mL
50 mM	0.0555 mL	0.2775 mL	0.5551 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

Eram MS, et al. A Potent, Selective, and Cell-Active Inhibitor of Human Type I Protein Arginine Methyltransferases. ACS Chem Biol. 2016 Mar 18;11(3):772-81.

Yinghui Zhu, et al. Targeting PRMT1-mediated FLT3 methylation disrupts maintenance of MLL-rearranged acute lymphoblastic leukemia. Blood. 2019 Oct 10;134(15):1257-1268.

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