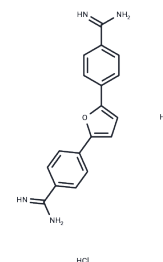


Furamidine dihydrochloride

Chemical Properties

CAS No. :	55368-40-6
Formula:	C ₁₈ H ₁₈ Cl ₂ N ₄ O
Molecular Weight:	377.27
Storage:	Store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i>



Biological Description

Description	Furamidine dihydrochloride (DB75 dihydrochloride) is a cell-permeable, selective small molecule inhibitor of protein arginine methyltransferase 1 (PRMT1) that also binds preferentially to strings of AT base pair sequences within the minor groove of DNA; it targets the PRMT1 enzyme active site primarily through a competitive mechanism with the protein substrate and is noncompetitive toward the cofactor, ultimately leading to the blockade of cell proliferation in various leukemia cell lines irrespective of their genetic lesions.
Targets(IC50)	Histone Methyltransferase,Parasite,PDE
In vitro	Furamidine dihydrochloride (20 μM, 72 hours) treatment of leukemia cell lines inhibited cell growth in most leukemia cell lines except HEL cells harboring the JAK2V617F mutation.[6]
In vivo	Furamidine dihydrochloride (1 mg/kg, intraperitoneal injection, 3 times a week, repeated every 4 weeks for 34 weeks) was used to treat female NZB/NZW mice and was found to suppress proteinuria and prolong the survival of lupus-prone NZB/NZW mice when combined with irinotecan. [5]

Solubility Information

Solubility	DMSO: 10 mg/mL (26.51 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: 1 mg/mL (2.65 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	2.6506 mL	13.2531 mL	26.5062 mL
5 mM	0.5301 mL	2.6506 mL	5.3012 mL
10 mM	0.2651 mL	1.3253 mL	2.6506 mL
50 mM	0.053 mL	0.2651 mL	0.5301 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

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