Data Sheet (Cat.No.T78159)

TargetMol

ATIC-IN-1 acetate

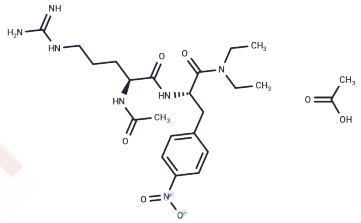
Chemical Properties

CAS No. :

Formula: C23H37N7O7

Molecular Weight: 523.59

Storage: Keep away from direct sunlight,Keep away from moisture,Store at low temperature
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	ATIC-IN-1 acetate is an inhibitor of aminoimidazole-carboxamide ribonucleotide transformylase/inosine monophosphate cyclohydrolase (ATIC) with potential anti-tumor activity. It inhibits AICAR Tfase by disrupting ATIC homo-dimerization.
Targets(IC50)	Others,Endogenous Metabolite
In vitro	ATIC-IN-1 acetate (Compound 14) is an inhibitor of aminoimidazolecarboxamide ribonucleotide translocase/inosine monophosphate cyclization hydrolase (ATIC) dimerization with a Ki value of 685 nM.[1] ATIC-IN-1 acetate (100-500 μM, treated for 48 hours) was able to hinder the proliferation of MCF-7 cells. [1] ATIC-IN-1 acetate (250 μM, 24-72 hours of action) decreases cell division rather than increasing cell death. [1]

Solubility Information

Solubility	H2O: 40 mg/mL (76.4 mM),Sonication is recommended. DMSO: 40 mg/mL (76.4 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 (3.82 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9099 mL	9.5495 mL	19.0989 mL
5 mM	0.382 mL	1.9099 mL	3.8198 mL
10 mM	0.191 mL	0.9549 mL	1.9099 mL
50 mM	0.0382 mL	0.191 mL	0.382 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

Spurr IB, et al. Targeting tumour proliferation with a small-molecule inhibitor of AICAR transformylase homodimerization. Chembiochem. 2012 Jul 23;13(11):1628-34.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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