ATIC-IN-1 acetate

Cat. No.: HY-150252A

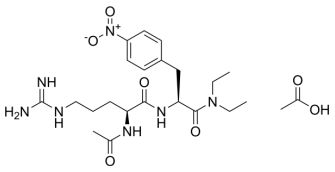
Molecular Formula: $C_{23}H_{37}N_7O_7$

Molecular Weight: 523.58

Target: Others

Pathway: Others

Storage: 4°C, sealed storage, away from moisture
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (95.50 mM; Need ultrasonic)
H_2O : 50 mg/mL (95.50 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	1.9099 mL	9.5496 mL	19.0993 mL
5 mM	0.3820 mL	1.9099 mL	3.8199 mL
10 mM	0.1910 mL	0.9550 mL	1.9099 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

ATIC-IN-1 (compound 14) acetate is an inhibitor targeting to Aminoimidazole carboxamide ribonucleotide transformylase/inosine monophosphate cyclohydrolase (ATIC) dimerization with a K_i value of 685 nM. ATIC dimerization is crucial for its aminoimidazole carboxamide ribonucleotide (AICAR) transformylase activity. ATIC-IN-1 acetate exhibits anti-tumor activity via reduction in cell numbers and cell division rates[1].

In Vitro

ATIC-IN-1 acetate (10 μM, 50 μM) is a specific inhibitor, and shows nonspecific aggregate mechanism in the present of 1 mg/mL and 10 mg/mL BSA[1].
ATIC-IN-1 acetate (100-500 μM; 48 h) inhibits the proliferation of MCF-7 cells[1].
ATIC-IN-1 acetate (250 μM; 24-72 h) results the reduction of division rather than leads to cell death increase[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

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

Caution: Product has not been fully validated for medical applications. For research use only.

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