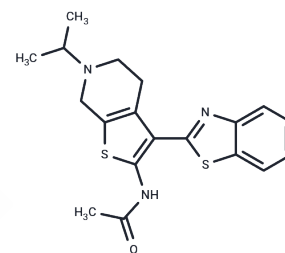


APE1-IN-1

Chemical Properties

CAS No. :	524708-03-0
Formula:	C19H21N3OS2
Molecular Weight:	371.52
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	APE1-IN-1 is a potent inhibitor of purine/pyrimidine endonuclease 1 (APE1) that crosses the blood-brain barrier, exhibits potential antitumor activity, and enhances the cytotoxicity of the alkylating agent [methyl methanesulfonate] on cancer cells.
Targets(IC50)	DNA/RNA Synthesis
In vitro	In the qHTS assay, APE1-IN-1 (compound 3) displays an IC50 of 2 μ M, while in a radiotracer incision assay (RIA), it exhibits an IC50 of 12 μ M[1]. In a dose-dependent manner, APE1-IN-1 (at concentrations of 0, 1, 3, 10, 30, or 100 μ M for 15 minutes) inhibits AP site incision in HeLa whole cell extracts[1]. Furthermore, APE1-IN-1 (at concentrations ranging from 5 to 30 μ M for 24 hours) demonstrates cytotoxic activity against HeLa cells and enhances the activity of methyl methanesulfonate and Temozolomide[1].
In vivo	Administered at a single dosage of 30 mpk via intraperitoneal injection, APE1-IN-1 demonstrates favorable pharmacokinetic properties[1].

Solubility Information

Solubility	DMSO: 10 mg/mL (26.92 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 (2.69 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	2.6916 mL	13.4582 mL	26.9165 mL
5 mM	0.5383 mL	2.6916 mL	5.3833 mL
10 mM	0.2692 mL	1.3458 mL	2.6916 mL
50 mM	0.0538 mL	0.2692 mL	0.5383 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

Rai G, et al. Synthesis, biological evaluation, and structure-activity relationships of a novel class of apurinic/aprimidinic endonuclease 1 inhibitors. *J Med Chem.* 2012 Apr 12;55(7):3101-12.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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