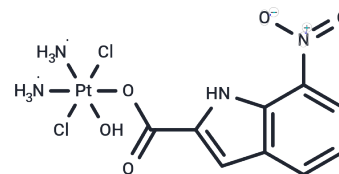


APE1-IN-2

Chemical Properties

CAS No. : 2923433-95-6
Formula: C₉H₁₂Cl₂N₄O₅Pt
Molecular Weight: 522.21
Appearance: no data available
Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	APE1-IN-2 (compound AP1), a Pt(IV) proagent, selectively targets the essential base excision repair protein apurinic/apyrimidinic endonuclease 1 (APE1). Exhibiting anticancer properties, APE1-IN-2 prompts the intracellular accumulation of platinum and initiates the activation of DNA damage response and apoptosis pathways [1].
Targets(IC50)	Apoptosis
In vitro	APE1-IN-2 (compound AP1) robustly suppresses malignant cell proliferation, including that of Cisplatin-resistant strains, exhibiting up to 18.11-fold greater inhibition than Cisplatin [1]. The compound at 500 nM for 24 hours halts cell cycle progression in A549 and MCF7 cells [1], while at 10 μM for 24 hours, it triggers p53-dependent apoptosis in A549 cells [1]. Additionally, APE1-IN-2 dose-dependently inhibits AP-cleavage activity with a half-maximal inhibitory concentration (IC ₅₀) of 45.14 ± 17.37 μM over 72 hours [1]. It directly targets APE1 endonuclease activity, disrupting miRNA processing and enhancing PTEN, a tumor suppressor gene expression [1].
In vivo	APE1-IN-2 (compound AP1) (2 mg/kg, IP, once every three days for 15 days) demonstrates antitumor efficacy in the A549 xenograft model [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9149 mL	9.5747 mL	19.1494 mL
5 mM	0.383 mL	1.9149 mL	3.8299 mL
10 mM	0.1915 mL	0.9575 mL	1.9149 mL
50 mM	0.0383 mL	0.1915 mL	0.383 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481