

KT-333 ammonium

Chemical Properties

CAS No. : 2839758-34-6

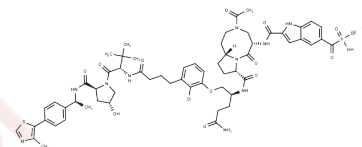
Formula: C60H77ClN11O14PS

Molecular Weight: 1274.81

Keep away from direct sunlight

Storage: 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	KT-333 ammonium (Compound A) acts as a molecular glue that targets and promotes the degradation of the STAT3 protein through the ubiquitin-proteasome system. This compound achieves selective degradation by binding simultaneously to the STAT3 protein and the E3 ubiquitin ligase von Hippel-Lindau protein (VHL). It exhibits strong selectivity and efficacy in degrading STAT3, possessing notable antitumor properties. KT-333 ammonium is particularly useful for research on hematologic malignancies, including large granular lymphocytic leukemia (LGL-L), peripheral T-cell lymphoma (PTCL), and cutaneous T-cell lymphoma (CTCL) [1].
Targets(IC50)	STAT,Molecular Glues
In vitro	KT-333 ammonium, at a concentration of (11.8±2.3 nM over 48 hours), causes irreversible growth inhibition and induces the activity of caspase 3/7, a marker of apoptosis, in the SU-DHL-1 cell line following STAT3 degradation [1]. Additionally, KT-333 ammonium demonstrates STAT3 protein degradation with GI50 values ranging from 8.1 to 57.4 nM across various ALCL cell lines in cell phenotype analysis [1].
In vivo	KT-333 ammonium exhibited dose-dependent antitumor activity when administered intravenously at doses of 5, 10, 15, and 45 mg/kg once weekly for two weeks. Mice receiving 5 mg/kg showed 79.9% tumor growth inhibition (TGI), while doses of 10, 15, or 45 mg/kg led to complete tumor regression, sustained until the study's conclusion [1]. Similarly, doses of 10, 20, and 30 mg/kg resulted in dose-dependent antitumor effects, with mice given 10 mg/kg achieving 83.8% TGI, and those receiving 20 or 30 mg/kg experiencing complete tumor regression, also persisting through to the end of the study [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.7844 mL	3.9222 mL	7.8443 mL
5 mM	0.1569 mL	0.7844 mL	1.5689 mL
10 mM	0.0784 mL	0.3922 mL	0.7844 mL
50 mM	0.0157 mL	0.0784 mL	0.1569 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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