Data Sheet (Cat.No.T217157)

TargetMol

Pro-PEG3-BA

Chemical Properties

CAS No. :	3057939-64-4
Formula:	C37H52ClN8O7P
Molecular Weight:	787.3
Storage:	Keep away from direct sunlight 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	Pro-PEG3-BA is a PROTAC degrader targeting EML4-ALK and EGFR, effectively degrading EML4-ALK and EGFR mutants (L858R/T790M) with DC50 values of 0.42 μM and 13.50 μM, respectively. In vitro, it inhibits the proliferation of non-small cell lung cancer cells, inducing cell cycle arrest and apoptosis. Pro-PEG3-BA demonstrates favorable safety characteristics and can reduce EML4-ALK protein expression by modulating the ubiquitin-proteasome system in vivo, making it suitable for research on non-small cell lung cancer.
Targets(IC50)	Apoptosis,EGFR,PROTACs
In vitro	Pro-PEG3-BA binds to purified ALK protein in vitro with a Kd of 387 nM. Within HEK293T cells, it interacts with the GID4 protein, exhibiting a Kd of 6.05 μM. In H3122 (EML4-ALK) cells, Pro-PEG3-BA specifically degrades the EML4-ALK fusion protein without affecting wild-type or mutant ALK at concentrations of 0-20 μM for 48 hours. The compound inhibits cell growth with an IC50 of 0.16 μM in H3122 cells (EML4-ALK) over 48 hours and an IC50 of 8.8 μM in H1975 cells (EGFR-L858R/T790M) over 72 hours, while demonstrating low toxicity to normal cells (HEK293T cells). At 10 μM for 24 hours, Pro-PEG3-BA significantly reduces the abundance of ALK protein and downregulates CD2AP, MRPS23, RNF2, RAB18, and TRMT10C, indicating high selectivity in targeting ALK degradation; meanwhile, it upregulates POLR2F, WASHC2C, NCOR2, ZNF622, ALDH6A1, PRRC1, GPD1L, EXOC7, WACPAF1 in H1975 (EGFR L858R/T790M) cells. The compound, at concentrations of 10-20 μM for 0-24 hours, induces a time-dependent marked reduction of EML4-ALK or EGFR mutant proteins in H3122 (EML4-ALK) (10 μM) and H1975 (EGFR-L858R/T790M) (20 μM) cells. Pro-PEG3-BA reduces EML4-ALK and EGFR mutant levels in a proteasome-dependent manner in H3122 (EML4-ALK) and H1975 (EGFR-L858R/T790M) cells at 0.5-20 μM for 6 or 12 hours. It also induces cell cycle arrest and apoptosis in H1975 (EGFR-L858R/T790M) and H3122 (EML4-ALK) cells at 5-10 μM for 48-72 hours.
In vivo	Administered at 10 mg/kg via intraperitoneal injection every other day for a total of 8 doses, Pro-PEG3-BA significantly reduces EML4-ALK protein expression in a mouse xenograft model induced with H3122 cells. It also exhibits a favorable safety profile.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.2702 mL	6.3508 mL	12.7016 mL
5 mM	0.254 mL	1.2702 mL	2.5403 mL
10 mM	0.127 mL	0.6351 mL	1.2702 mL
50 mM	0.0254 mL	0.127 mL	0.254 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.