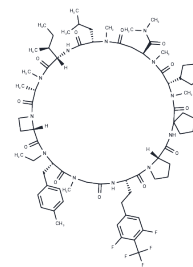


Paluratide

Chemical Properties

CAS No. :	2676177-63-0
Formula:	C73H105F5N12O12
Molecular Weight:	1437.68
Storage:	Keep away from moisture, Keep away from direct sunlight 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	Paluratide (LUNA18) is a reversible cyclic peptide KRAS inhibitor with the advantages of oral availability and cell permeability for the treatment of kras-mutant cancers, which inhibits cancer cell proliferation by phosphorylating ERK and AKT, and also inhibits the interaction of RAS with guanine nucleotide exchange factors (GEFs).
Targets(IC50)	ERK,Akt,Ras,Kras
In vitro	Paluratide is a high-affinity cyclic peptide KRAS inhibitor that blocks KRAS/SOS1 interaction ($IC_{50} \approx 0.5nM$). Paluratide inhibits proliferation in various KRAS-mutant cells ($IC_{50} = 0.17-2.9nM$) and reduces GTP-KRAS, pERK1/2, and pAKT levels significantly at 100nM[1].
In vivo	Paluratide shows 21% oral bioavailability in mice and, at 10mg/kg daily, significantly suppresses tumor growth in KRAS-G12V xenograft models while reducing KRAS pathway activity, with no notable toxicity observed [1].

Solubility Information

Solubility	DMSO: 80 mg/mL (55.65 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: 3.3 mg/mL (2.3 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	0.6956 mL	3.4778 mL	6.9557 mL
5 mM	0.1391 mL	0.6956 mL	1.3911 mL
10 mM	0.0696 mL	0.3478 mL	0.6956 mL
50 mM	0.0139 mL	0.0696 mL	0.1391 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

Ohta A, et al. Validation of a New Methodology to Create Oral Drugs beyond the Rule of 5 for Intracellular Tough Targets. J Am Chem Soc. 2023 Nov 8;145(44):24035-24051.

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