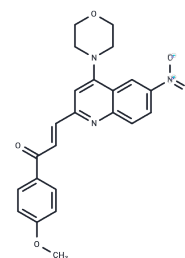


hnRNPK-IN-1

Chemical Properties

CAS No. :	2313528-04-8
Formula:	C23H21N3O5
Molecular Weight:	419.43
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	hnRNPK-IN-1 is a specific ligand that binds to the heterogeneous nuclear ribonucleoprotein K (hnRNPK) with high affinity, evidenced by Kd values of 4.6 μ M and 2.6 μ M determined using surface plasmon resonance (SPR) and microscale thermophoresis (MST), respectively. This binding event leads to the disruption of hnRNPK's interaction with the c-myc promoter, resulting in the inhibition of c-myc transcription. Additionally, hnRNPK-IN-1 induces apoptosis in Hela cells and exhibits potent anti-tumor activities[1].
Targets(IC50)	Apoptosis,Others,c-Myc
In vitro	hnRNPK-IN-1 (Compound 25; 1.25-5 μ M; 24 hours) treatment induces Hela cells apoptosis could be due to its repression of cmyc transcription[1].hnRNPK-IN-1 (1.25-5 μ M; 48 hours) treatment down-regulates c-myc gene transcription and expression in Hela cells in a dose-dependent manner[1].hnRNPK-IN-1 shows a selective anti-proliferative effect on human cancer cell lines (Siha, A549, Hela, U2OS, A375, HuH7 and HEK293 cells) with IC50 values ranged from 1.36 to 3.59 μ M[1].hnRNPK-IN-1 could selectively bind to hnRNP K without significant interaction with c-myc promoter DNA. The binding of hnRNPK-IN-1 to hnRNP K could disrupt the interaction between hnRNP K and c-myc promoter DNA in vitro and in cells[1].
In vivo	hnRNPK-IN-1 (Compound 25; 6.7-20 mg/kg; i.p.; once a day; for three weeks) exhibits good tumor growth inhibition in a Hela xenograft tumor model[1].

Solubility Information

Solubility	DMSO: 5 mg/mL (11.92 mM),Sonication and heating to 80°C are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3842 mL	11.9209 mL	23.8419 mL
5 mM	0.4768 mL	2.3842 mL	4.7684 mL
10 mM	0.2384 mL	1.1921 mL	2.3842 mL
50 mM	0.0477 mL	0.2384 mL	0.4768 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

Bing Shu, et al. Syntheses and evaluation of new Quinoline derivatives for inhibition of hnRNP K in regulating oncogene c-myc transcription. Bioorg Chem. 2019 Apr;85:1-17.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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