

Pan-RAS-IN-1

Chemical Properties

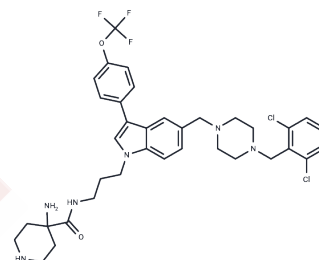
CAS No. : 1835283-94-7

Formula: C₃₆H₄₁Cl₂F₃N₆O₂

Molecular Weight: 717.65

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	Pan-RAS-IN-1 is an inhibitor of pan-Ras. It disrupts the interaction of Ras proteins and their effectors.
Targets(IC ₅₀)	MAPK,Ras
In vitro	Pan-RAS-IN-1 is cytostatic, possibly due to pan-RAS inhibition at some concentrations. Pan-RAS-IN-1 is evaluated in primary T cell acute lymphoblastic leukemia (T-ALL) cells. Selective lethality is observed, with mutant NRAS cells retaining only 20%-40% viability after 5 µM treatment. Pan-RAS-IN-1 binds to KRasG12D-GppNHp with an affinity of less than 20 µM. Pan-RAS-IN-1 binds to Ras proteins and exhibits lethality in cells partially dependent on the expression of Ras proteins. The potency of pan-RAS-IN-1 correlates with the degree of dependency on the mutated isoform over a 5-fold concentration range [1].
In vivo	Pan-RAS-IN-1-treated mice show decreased tumor pERK levels compared with vehicle-treated mice. Pan-RAS-IN-1 administration causes inhibition of tumor growth over 15 days of treatment. A modest increase in cleaved caspase-3 is also observed, showing that pan-RAS-IN-1 has the capacity to induce caspase activation in this model[1].

Solubility Information

Solubility	DMSO: 50 mg/mL (69.67 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.3934 mL	6.9672 mL	13.9344 mL
5 mM	0.2787 mL	1.3934 mL	2.7869 mL
10 mM	0.1393 mL	0.6967 mL	1.3934 mL
50 mM	0.0279 mL	0.1393 mL	0.2787 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.

Reference

Welsch ME, et al. Multivalent Small-Molecule Pan-RAS Inhibitors. Cell. 2017 Feb 23;168(5):878-889.e29.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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