

P-gb-IN-1

Chemical Properties

CAS No. : 2632874-49-6

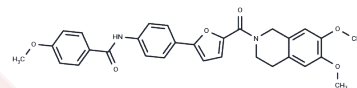
Formula: C₃₀H₂₈N₂O₆

Molecular Weight: 512.55

Store at low temperature

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	P-gb-IN-1 is a potent P-glycoprotein (P-gp) inhibitor that exhibits reverse activity by inhibiting P-gp outflow. P-gb-IN-1 has been shown to inhibit P-gp by hydrogen bonding with residues Asn 721 and Met 986. P-gb-IN-1 showed low toxicity in MCF-7/ADR cells.
Targets(IC50)	P-gp

Solubility Information

Solubility	DMSO: 50 mg/mL (97.55 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	1.951 mL	9.7551 mL	19.5103 mL
5 mM	0.3902 mL	1.951 mL	3.9021 mL
10 mM	0.1951 mL	0.9755 mL	1.951 mL
50 mM	0.039 mL	0.1951 mL	0.3902 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

Zhikun Yang, et al. Discovery of 2,5-disubstituted furan derivatives featuring a benzamide motif for overcoming P-glycoprotein mediated multidrug resistance in MCF-7/ADR cell. Eur J Med Chem. 2023 Sep 5;257:115462.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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