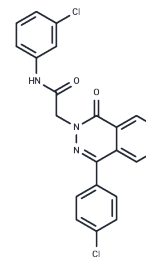


PARP-1-IN-2

Chemical Properties

CAS No. :	684234-55-7
Formula:	C ₂₂ H ₁₅ Cl ₂ N ₃ O ₂
Molecular Weight:	424.28
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	PARP-1-IN-2 is a potent PARP1 inhibitor that crosses the blood-brain barrier (IC ₅₀ : 149 nM). PARP-1-IN-2 showed significant antiproliferative activity against the human lung adenocarcinoma epithelial cell line A549 in cellular assays. PARP-1-IN-2 induced apoptosis in A549 cells.
Targets(IC ₅₀)	Apoptosis, Caspase, PARP
In vitro	PARP-1-IN-2 (compound 11g) (0-10 μM, 24-48 h) exhibits significant anti-proliferative activity against A549 cells without notable cytotoxicity on HFF cells.[1] PARP-1-IN-2 (0-10 μM, 24 h) reduces pro-caspase-3 and phosphorylated AKT expression, while increasing caspase-3, caspase-9 protein, and cleaved PARP-1 expression.[1]

Solubility Information

Solubility	DMSO: 9 mg/mL (21.21 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 0.5 mg/mL (1.18 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	2.3569 mL	11.7847 mL	23.5693 mL
5 mM	0.4714 mL	2.3569 mL	4.7139 mL
10 mM	0.2357 mL	1.1785 mL	2.3569 mL
50 mM	0.0471 mL	0.2357 mL	0.4714 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

Almahli H, et al. Development of novel synthesized phthalazinone-based PARP-1 inhibitors with apoptosis inducing mechanism in lung cancer. *Bioorg Chem.* 2018;77:443-456.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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