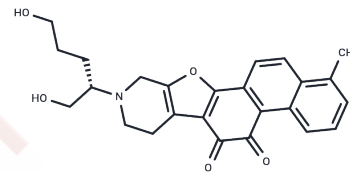


NLRP3-IN-16

Chemical Properties

CAS No. :	2906872-59-9
Formula:	C ₂₅ H ₂₅ N ₃ O ₅
Molecular Weight:	419.47
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	NLRP3-IN-16 is a potent, selective inhibitor of the NLRP3 inflammasome, effectively reducing IL-1 β release with an IC ₅₀ of 0.065 μ M, and is primarily utilized in inflammation research [1].
Targets(IC ₅₀)	NOD-like Receptor (NLR)
In vitro	NLRP3-IN-16 (Compound 12d) inhibits the release of IL-1 β with an IC ₅₀ of 0.065 μ M, as measured by ELISA [1]. At a concentration of 2 μ M, for 3 hours, it suppresses the secretion of IL-1 β (p17) and caspase-1 (p20) in mouse peritoneal macrophages (PM) [1]. Additionally, NLRP3-IN-16 impedes the formation of the NLRP3 inflammasome complex by inhibiting ASC oligomerization [1]. It exhibits metabolic stability in human and mouse liver microsomes, with a half-life (T _{1/2}) of 223.5 minutes and an intrinsic clearance (Cl _{int}) of 6.2 μ L/min/mg [1].
In vivo	NLRP3-IN-16 (Compound 5j) exhibited anti-inflammatory effects in a sepsis mouse model when administered at a dose of 50 mg/kg intraperitoneally [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.384 mL	11.9198 mL	23.8396 mL
5 mM	0.4768 mL	2.384 mL	4.7679 mL
10 mM	0.2384 mL	1.192 mL	2.384 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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