

## STING-IN-5

## Chemical Properties

CAS No. :	2920064-17-9
Formula:	C47H67NO9S2
Molecular Weight:	854.17
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	STING-IN-5, a potent inhibitor of the Stimulator of Interferon Genes (STING) pathway, significantly suppresses lipopolysaccharide (LPS)-induced nitric oxide (NO) synthesis in macrophages, exhibiting an IC <sub>50</sub> of 1.15 μM. This compound dampens the inflammatory response and offers potential for research into anti-inflammatory diseases and sepsis [1].
Targets(IC <sub>50</sub> )	STING
In vitro	STING-IN-5 (compound 30) (40 μM; 24 h) exerts minimal impact on the viability of RAW264.7 cells [1]. At concentrations of 2.5 and 5 μM for 2 hours, STING-IN-5 inhibits nitric oxide (NO) production in LPS-stimulated RAW264.7 cells, with inhibition rates of 69.28 ± 2.36% and 78.66 ± 2.73% respectively, and an IC <sub>50</sub> of 1.15 ± 0.15 μM [1]. Furthermore, STING-IN-5 (0.5-2 μM; 2 h) suppresses STING activation and subsequent TBK1/IRF3/NF-κB signaling [1].
In vivo	STING-IN-5, administered orally at doses ranging from 1.25 to 5 mg/kg once daily for three consecutive days, showed significant protective effects against acute hepatic injury in mice with sepsis [1]. The pharmacokinetic parameters of STING-IN-5 in male Sprague-Dawley rats include a peak concentration time (T <sub>max</sub> ) of 1 hour, a maximum concentration (C <sub>max</sub> ) of 66.52 ng/mL, an area under the curve from time zero to the last quantifiable concentration (AUC <sub>0-t</sub> ) of 81.08 ng/mL·h, an area under the curve from time zero to infinity (AUC <sub>0-∞</sub> ) of 135.7 ng/mL·h, a half-life (T <sub>1/2</sub> ) of 1.11 hours, a mean residence time from time zero to the last quantifiable concentration (MRT <sub>0-t</sub> ) of 0.99 hours, and a mean residence time from time zero to infinity (MRT <sub>0-∞</sub> ) of 2.02 hours [1].

### Preparing Stock Solutions

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	1.1707 mL	5.8536 mL	11.7073 mL
5 mM	0.2341 mL	1.1707 mL	2.3415 mL
10 mM	0.1171 mL	0.5854 mL	1.1707 mL
50 mM	0.0234 mL	0.1171 mL	0.2341 mL

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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.

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