

LB244

## Chemical Properties

CAS No. : 3074622-05-9

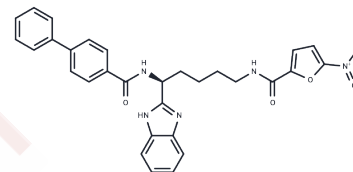
Formula: C<sub>30</sub>H<sub>27</sub>N<sub>5</sub>O<sub>5</sub>

Molecular Weight: 537.57

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	LB244 is a homologue of BB-Cl-amidine and functions as an orally effective STING inhibitor with an EC <sub>50</sub> value of 0.8 μM, capable of suppressing STING-dependent inflammatory signaling, although pharmacokinetic studies indicate limited oral activity in mice, making it a useful tool for mechanistic investigations of innate immunity and inflammatory disease models.
Targets(IC <sub>50</sub> )	STING
In vitro	In cellular assays using human THP-1 monocytes and murine macrophages, the cells were stimulated with the cyclic dinucleotide agonist 2'3'-cGAMP to activate the pathway. LB244 was applied at concentrations corresponding to an IC <sub>50</sub> range of 0.8 to 4.5 μM [1].
In vivo	Pharmacokinetic profiling was conducted in mice to evaluate the systemic properties of the compound. LB244 was administered via oral gavage (10 mg/kg) or intraperitoneal injection (5 mg/kg). Blood samples were analyzed to determine metabolic parameters, revealing a systemic clearance of 2854.3 mL/min/kg and a half-life (T <sub>1/2</sub> ) of 2.8 hours. Following oral administration, the plasma analysis detected a maximal concentration (C <sub>max</sub> ) of 0.04 μM [1].

## Solubility Information

Solubility	DMSO: 80 mg/mL (148.82 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	1.8602 mL	9.3011 mL	18.6022 mL
5 mM	0.372 mL	1.8602 mL	3.7204 mL
10 mM	0.186 mL	0.9301 mL	1.8602 mL
50 mM	0.0372 mL	0.186 mL	0.372 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.

### Reference

Barasa L, et al. Development of LB244, an Irreversible STING Antagonist. J Am Chem Soc. 2023 Sep 20;145(37):20273-20288. .

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