LB244

Cat. No.: HY-156117

Molecular Formula: $C_{30}H_{27}N_5O_5$

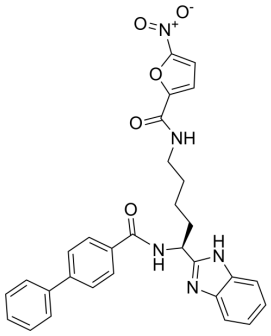
Molecular Weight: 537.57

Target: STING

Pathway: Immunology/Inflammation

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (186.02 mM; Need ultrasonic)

Preparing Stock Solutions	Concentration / Solvent / Mass	1 mg	5 mg	10 mg
	1 mM	1.8602 mL	9.3011 mL	18.6022 mL
	5 mM	0.3720 mL	1.8602 mL	3.7204 mL
	10 mM	0.1860 mL	0.9301 mL	1.8602 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: 2.5 mg/mL (4.65 mM); Clear solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 2.5 mg/mL (4.65 mM); Clear solution; Need ultrasonic
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: 2.5 mg/mL (4.65 mM); Clear solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

LB244 is a homologue of BB-Cl-amidine, which is an orally effective STING inhibitor (EC_{50}=0.8 μM) and can be used to inhibit STING-dependent inflammatory diseases. The pharmacokinetic properties of LB244 indicate limited oral activity in mice[1].

In Vivo

Pharmacokinetic results of LB244 (10 mg/kg, po; 5 mg/kg, ip) in mice showed limited oral activity (C_{max}=0.04 μM) and short half-life ($T_{1/2}$=2.8 h). Its body clearance is 2854.3 mL/min/kg[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. 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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