

E6446

Chemical Properties

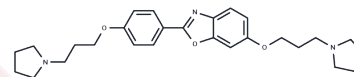
CAS No. : 1219925-73-1

Formula: C₂₇H₃₅N₃O₃

Molecular Weight: 449.59

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	E6446 inhibits Toll-like receptor (TLR)7 and 9 signaling. E6446 works in a variety of human and mouse cell types and inhibits DNA-TLR9 interaction in vitro. When administered to mice, this compound suppresses responses to challenge doses of cytidine-phosphate-guanidine (CpG)-containing DNA, which stimulates TLR9.
Targets(IC50)	Stearoyl-CoA Desaturase (SCD),TLR

Solubility Information

Solubility	DMSO: 2.3 mg/mL (5.12 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween-80+45% Saline: 0.5 mg/mL (1.11 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	2.2242 mL	11.1212 mL	22.2425 mL
5 mM	0.4448 mL	2.2242 mL	4.4485 mL
10 mM	0.2224 mL	1.1121 mL	2.2242 mL
50 mM	0.0445 mL	0.2224 mL	0.4448 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

Franklin BS, et al. Therapeutical targeting of nucleic acid-sensing Toll-like receptors prevents experimental cerebral malaria. *Proc Natl Acad Sci U S A*. 2011 Mar 1;108(9):3689-94.

Lu P, Zheng H, Meng H, et al. Mitochondrial DNA induces nucleus pulposus cell pyroptosis via the TLR9-NF- κ B-NLRP3 axis. *Journal of Translational Medicine*. 2023, 21(1): 1-19.

Lamphier M, et al. Novel small molecule inhibitors of TLR7 and TLR9: mechanism of action and efficacy in vivo. *Mol Pharmacol*. 2014 Mar;85(3):429-40.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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