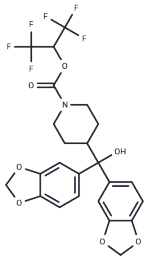
Data Sheet (Cat.No.T4052)

TargetMol

KML29

Chemical Properties



CAS No. : 1380424-42-9

Formula: C24H21F6NO7

Molecular Weight: 549.42

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	KML29 is highly selective and effective monoacylglycerol lipase (MAGL) inhibitor. It has effective inhibition of human/mouse/rat MAGL (IC50: 5.9/15/43 nM). It has not inhibitory for FAAH (IC50 > 50 μM). It also effectively and selectively blocks hydrolysis of 2-arachidonoylglycerol (2-AG) in mice (IC50: 2.5 nM, 2-AG; >50 μM, AEA).
Targets(IC50)	MAGL,Lipase
In vivo	DprE1-IN-2 has efficacy in a rodent model of tuberculosis.

Solubility Information

Solubility	DMSO: 50 mg/mL (91.01 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: 2 mg/mL (3.64 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8201 mL	9.1005 mL	18.201 mL
5 mM	0.364 mL	1.8201 mL	3.6402 mL
10 mM	0.182 mL	0.9101 mL	1.8201 mL
50 mM	0.0364 mL	0.182 mL	0.364 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

Chang JW, et al. Highly selective inhibitors of monoacylglycerol lipase bearing a reactive group that is bioisosteric with endocannabinoid substrates. Chem Biol. 2012 May 25;19(5):579-588.
Ignatowska-Jankowska BM,et al. In vivo characterization of the highly selective monoacylglycerol lipase inhibitor KML29: antinociceptive activity without cannabimimetic side effects. Br J Pharmacol. 2014 Mar;171(6):1392-1407.