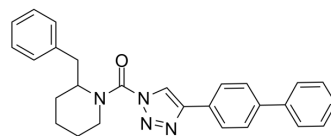


## KT109

Cat. No.:	HY-18540		
CAS No.:	1402612-55-8		
Molecular Formula:	C <sub>27</sub> H <sub>26</sub> N <sub>4</sub> O		
Molecular Weight:	422.52		
Target:	MAGL		
Pathway:	Metabolic Enzyme/Protease		
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 (236.68 mM; ultrasonic and warming and heat to 80°C)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.3668 mL	11.8338 mL	23.6675 mL
	5 mM	0.4734 mL	2.3668 mL	4.7335 mL
	10 mM	0.2367 mL	1.1834 mL	2.3668 mL

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

### In Vivo

- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: 2.5 mg/mL (5.92 mM); Clear solution; Need ultrasonic and warming and heat to 80°C

## BIOLOGICAL ACTIVITY

### Description

KT109 is a potent and an isoform-selective inhibitor of diacylglycerol lipase- $\beta$  (DAGL $\beta$ ) with an IC<sub>50</sub> of 42 nM. KT109 has ~60-fold selectivity for DAGL $\beta$  over DAGL $\alpha$ . KT109 shows inhibitory activity against PLA2G7 (IC<sub>50</sub>=1  $\mu$ M). KT109 shows negligible activity against FAAH, MGLL, ABHD11, and cytosolic phospholipase A2 (cPLA2 or PLA2G4A). KT109 perturbs a lipid network involved in macrophage inflammatory responses and lowers 2-arachidonoylglycerol (2-AG), arachidonic acid and eicosanoids in mouse peritoneal macrophages<sup>[1]</sup>.

## REFERENCES

- [1]. Ku-Lung Hsu, et al. DAGL $\beta$  inhibition perturbs a lipid network involved in macrophage inflammatory responses. Nat Chem Biol. 2012 Dec;8(12):999-1007.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA