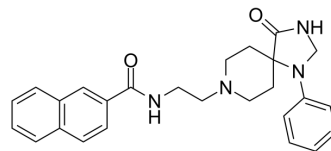


CAY10594

Cat. No.:	HY-121983		
CAS No.:	1130067-34-3		
Molecular Formula:	C ₂₆ H ₂₈ N ₄ O ₂		
Molecular Weight:	428.53		
Target:	Phospholipase		
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 : 11.36 mg/mL (26.51 mM); ultrasonic and warming and heat to 60°C)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.3336 mL	11.6678 mL	23.3356 mL
	5 mM	0.4667 mL	2.3336 mL	4.6671 mL
	10 mM	0.2334 mL	1.1668 mL	2.3336 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 1.14 mg/mL (2.66 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 1.14 mg/mL (2.66 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

CAY10594 is a potent phospholipase D2 (PLD2) inhibitor both in vitro (IC₅₀=140 nM) and in cells (IC₅₀=110 nM)^[1]. CAY10594 strongly inhibits the invasive migration of breast cancer cells in vitro and ameliorates acetaminophen-induced acute liver injury by regulating the phosphorylated-GSK-3β/JNK axis^[2].

REFERENCES

- [1]. Scott, S.A., Selvy, P.E., Buck, J.R., et al. Design of isoform-selective phospholipase D inhibitors that modulate cancer cell invasiveness

[2]. Lee SK, et al. A phospholipase D2 inhibitor, CAY10594, ameliorates acetaminophen-induced acute liver injury by regulating the phosphorylated-GSK-3 β /JNK axis. Sci Rep. 2019 May 10;9(1):7242.

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

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