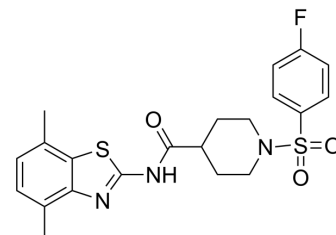


VU533

Cat. No.:	HY-155774		
CAS No.:	923417-09-8		
Molecular Formula:	C ₂₁ H ₂₂ FN ₃ O ₃ S ₂		
Molecular Weight:	447.55		
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 : 125 mg/mL (279.30 mM; ultrasonic and warming and heat to 60°C)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	2.2344 mL	11.1719 mL	22.3439 mL
5 mM	0.4469 mL	2.2344 mL	4.4688 mL
10 mM	0.2234 mL	1.1172 mL	2.2344 mL

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

BIOLOGICAL ACTIVITY

Description

APE-PLD (VU533) activator is a potent NAPE-PLD activator with an EC₅₀ value of 0.30 μM. NAPE-PLD activator (VU533) can enhance NAPE-PLD activity and increase efferocytosis by macrophages. NAPE-PLD activator (VU533) can be used for cardiometabolic diseases research^[1].

IC₅₀ & Target

PLD1
0.3 μM (EC50)

In Vitro

NAPE-PLD activator (VU533) (0.1-30 μM, 24 h) has no cytotoxicity when tested at 30 μM in either RAW264.7 or HepG2 cells^[1]. NAPE-PLD activator (0.1-30 μM, 24 h) increases Nape-pld activity in a concentration-dependent manner in RAW264.7 cells and HepG2 cells^[1].

NAPE-PLD activator (10 μM, 6 h) enhances efferocytosis in bone-marrow derived macrophages (BMDM) ^[1].

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

Cell Cytotoxicity Assay^[1]

Cell Line:	RAW264.7, HepG2
Concentration:	0.1-30 μ M
Incubation Time:	24 h
Result:	Showed no cytotoxicity when tested at 30 μ M in either RAW264.7 or HepG2 cells.
Cell Autophagy Assay ^[1]	
Cell Line:	BMDM
Concentration:	10 μ M
Incubation Time:	6 h
Result:	Enhanced efferocytosis compared to vehicle treated BMDM at 10 μ M.

REFERENCES

[1]. Zarrow JE, et al. Small Molecule Activation of NAPE-PLD Enhances Efferocytosis by Macrophages. ACS Chem Biol. 2023 Aug 18;18(8):1891-1904.

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

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