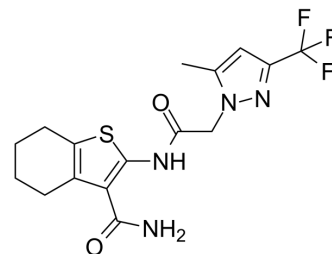


## HBT1

Cat. No.:	HY-122742
CAS No.:	489408-02-8
Molecular Formula:	C <sub>16</sub> H <sub>17</sub> F <sub>3</sub> N <sub>4</sub> O <sub>2</sub> S
Molecular Weight:	386.39
Target:	iGluR
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



### SOLVENT & SOLUBILITY

In Vitro	DMSO : 250 mg/mL (647.01 mM; Need ultrasonic)						
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg	
				1 mM	2.5881 mL	12.9403 mL	25.8806 mL
				5 mM	0.5176 mL	2.5881 mL	5.1761 mL
				10 mM	0.2588 mL	1.2940 mL	2.5881 mL
Please refer to the solubility information to select the appropriate solvent.							
In Vivo	1. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (5.38 mM); Clear solution						

### BIOLOGICAL ACTIVITY

Description	HBT1 is a potent $\alpha$ -Amino-3-hydroxy-5-methyl-4-isoxazole-propionic acid (AMPA) receptor (AMPA-R) potentiator. HBT1 bonds with S518 in the ligand-binding domain (LBD) of AMPA-R in a glutamate-dependent manner. HBT1 did not show remarkable bell-shaped response in brain-derived neurotrophic factor (BDNF) production in primary neurons <sup>[1]</sup> .
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### REFERENCES

[1]. Akiyoshi Kunugi, et al. HBT1, a Novel AMPA Receptor Potentiator with Lower Agonistic Effect, Avoided Bell-Shaped Response in In Vitro BDNF Production. J Pharmacol Exp Ther. 2018 Mar;364(3):377-389.

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

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