# Data Sheet (Cat.No.T8779)



#### HBT1

#### **Chemical Properties**

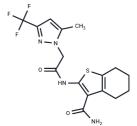
CAS No.: 489408-02-8

Formula: C16H17F3N4O2S

Molecular Weight: 386.39

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



# **Biological Description**

Description	HBT1 is an AMPA receptor potentiator that induces production of brain-derived neurotrophic factor (BDNF) and exhibits little agonistic effect in primary neurons. HBT1 binds to ligand-binding domain of AMPA-R in glutamate dependent manner.
Targets(IC50)	GluR
In vitro	HBT1 bound to the ligand-binding domain (LBD) of AMPA-R in a glutamate-dependent manner.?The mode of HBT1 and LY451395 binding to a pocket in the LBD of AMPA-R differed: HBT1, formed hydrogen bonds with S518 in the LBD.?Lower agonistic profile of HBT1 may associate with its lower risks of bell-shaped responses in BDNF production in primary neurons.

# **Solubility Information**

Solubility	DMSO: 3.87 mg/mL (10 mM),
	(< 1 mg/ml refers to the product slightly soluble or insoluble)

# **Preparing Stock Solutions**

	1mg	5mg	10mg
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	1.294 mL	2.5881 mL
50 mM	0.0518 mL	0.2588 mL	0.5176 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.

#### Reference

Kunugi A, Tajima Y, Kuno H, et al. HBT1, a novel AMPA receptor potentiator with lower agonistic effect, avoided bell-shaped response in in vitro BDNF production[J]. Journal of Pharmacology & Experimental Therapeutics, 2018:

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