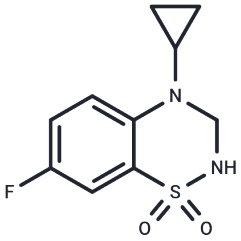
Data Sheet (Cat.No.T9177)

TargetMol

BPAM344

Chemical Properties



CAS No. : 1204572-55-3

Formula: C10H11FN2O2S

Molecular Weight: 242.27

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	BPAM344 is a potent positive allosteric modulator (PAM) of the KAR subunits GluK1b, GluK2a, and GluK3a.
Targets(IC50)	iGluR
In vitro	BPAM344 potentiated glutamate-evoked currents of GluK2a 21-fold at the highest concentration tested (200 μM), with an EC50 of 79 μM. BPAM344 markedly decreased desensitization kinetics (from 5.5 to 775 ms). BPAM521 potentiated the recorded peak current amplitude of GluK2a 12-fold at a concentration of 300 μM with an EC50 value of 159 μM. BPAM344 (100 μM) potentiated the peak current amplitude of KAR subunits GluK3a (59-fold), GluK2a (15-fold), GluK1b (5-fold), as well as the AMPA receptor subunit GluA1i (5-fold)[1].

Solubility Information

Solubility	DMSO: 55 mg/mL (227.02 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (8.26 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.1276 mL	20.6381 mL	41.2763 mL
5 mM	0.8255 mL	4.1276 mL	8.2553 mL
10 mM	0.4128 mL	2.0638 mL	4.1276 mL
50 mM	0.0826 mL	0.4128 mL	0.8255 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Larsen A P , Fievre S , Frydenvang K , et al. Identification and Structure-Function Study of Positive Allosteric Modulators of Kainate Receptors[J]. Molecular Pharmacology, 2017:mol.116.107599.