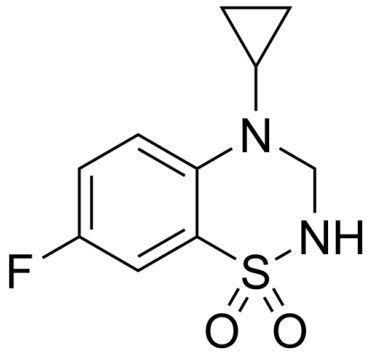
Data Sheet

Product Name:	BPAM344
Cat. No.:	CS-0103552
CAS No.:	1204572-55-3
Molecular Formula:	$C_{10}H_{11}FN_2O_2S$
Molecular Weight:	242.27
Target:	iGluR
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Solubility:	DMSO : 250 mg/mL (1031.91 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

BPAM344 is a **kainate receptor (KAR)** subunits **GluK1b**, **GluK2a**, and **GluK3a** positive allosteric modulator (PAM)[1]. ***In Vitro:*** BPAM344 potentiates glutamate-evoked currents of GluK2a 21-fold at the highest concentration tested (200 μM), with an EC_{50} of 79 μM. BPAM344 markedly decreases desensitization kinetics (from 5.5 to 775 ms), whereas it only has a minor effect on deactivation kinetics[1].

BPAM344 (100 μM) also potentiates 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].

References:

[1]. Anja Probst Larsen, et al. Identification and Structure-Function Study of Positive Allosteric Modulators of Kainate Receptors. Mol Pharmacol. 2017 Jun;91(6):576-585.

CAIndexNames:

2H-1,2,4-Benzothiadiazine, 4-cyclopropyl-7-fluoro-3,4-dihydro-, 1,1-dioxide

SMILES:

FC1=CC=C(C2=C1)N(C3CC3)CNS2(=O)=O

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