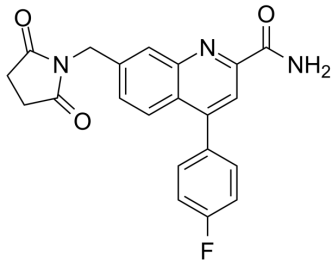
mGluR2 antagonist 1

Cat. No.:	HY-133555
CAS No.:	1432728-49-8
Molecular Formula:	$C_{21}H_{16}FN_3O_3$
Molecular Weight:	377.37
Target:	mGluR
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 2 years -20°C 1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (264.99 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.6499 mL	13.2496 mL	26.4992 mL
	5 mM	0.5300 mL	2.6499 mL	5.2998 mL
	10 mM	0.2650 mL	1.3250 mL	2.6499 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (6.62 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (6.62 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (6.62 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

mGluR2 antagonist 1 is a highly potent, orally bioavailable and selective class of mGluR2 negative allosteric modulator (IC_{50} of 9 nM) with excellent brain permeability[1].

IC_{50} & Target

mGluR2
9 nM (IC_{50})

In Vivo

In vivo, mGluR2 antagonist 1 (Compound 25) reverses the effect of mGluR2 agonist LY379268 in amphetamine-induced

hyperlocomotion and shows good efficacy in the mouse delayed non-match to position assay at 10 mg/kg.

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

REFERENCES

[1]. Youheng Shu,et al. Discovery of 4-arylquinoline-2-carboxamides, Highly Potent and Selective Class of mGluR2 Negative Allosteric Modulators: From HTS to Activity in Animal Models. Bioorg Med Chem Lett. 2020 May 1;30(9):127066.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA