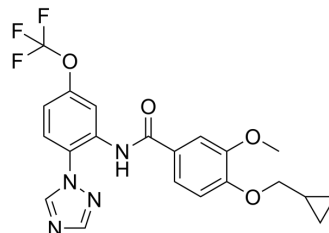


VU6012962

Cat. No.:	HY-114403		
CAS No.:	2313526-86-0		
Molecular Formula:	C ₂₁ H ₁₉ F ₃ N ₄ O ₄		
Molecular Weight:	448.4		
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 : 125 mg/mL (278.77 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
			10 mg	
Preparing Stock Solutions	1 mM	2.2302 mL	11.1508 mL	22.3015 mL
	5 mM	0.4460 mL	2.2302 mL	4.4603 mL
	10 mM	0.2230 mL	1.1151 mL	2.2302 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 (4.64 mM); Clear solution			

BIOLOGICAL ACTIVITY

Description	VU6012962 is an orally bioavailable and CNS-penetrant metabotropic glutamate receptor 7 negative allosteric modulator (mGlu ₇ NAM) with an IC ₅₀ of 347 nM ^[1] .
IC₅₀ & Target	mGlu ₇ 347 nM (IC ₅₀)
In Vitro	VU6012962 is highly selective for mGlu ₇ versus the other seven mGlu receptor subtypes ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	VU6012962 (1-10 mg/kg; i.p. injection; 60 minutes prior to testing) decreases anxiety in the elevated zero maze (EZM) assay in mice ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	C57Bl/6J male mice (8 weeks old) ^[1]
Dosage:	1, 3, and 10 mg/kg
Administration:	I.p. injections; 60 minutes prior to testing
Result:	Increased total time spent in the open arms at a dose of 3 mg/kg. 10 mg/kg did cause a decrease in overall locomotion.

REFERENCES

[1]. Reed CW, et al. Discovery of an orally bioavailable and Central Nervous System (CNS) penetrant mGlu7 Negative Allosteric Modulator (NAM) in vivo tool compound: N-(2-(1H-1,2,4-triazol-1-yl)-5-(trifluoromethoxy)phenyl)-4-(cyclopropylmethoxy)-3-methoxybenzamide (VU6012962). J Med Chem. 2019 Jan 4.

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

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