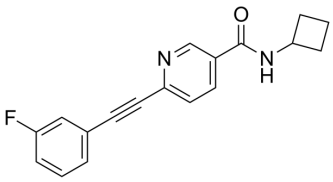
VU0360172

Cat. No.:	HY-120589
CAS No.:	1310012-12-4
Molecular Formula:	$C_{18}H_{15}FN_2O$
Molecular Weight:	294.32
Target:	mGluR
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 83.33 mg/mL (283.13 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.3977 mL	16.9883 mL	33.9766 mL
	5 mM	0.6795 mL	3.3977 mL	6.7953 mL
	10 mM	0.3398 mL	1.6988 mL	3.3977 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 (7.07 mM); Clear solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

VU0360172 is a potent and selective mGlu5 receptor positive allosteric modulator with an EC_{50} value of 16 nM and a K_i of 195 nM, respectively. VU0360172 stimulates polyphosphoinositide (PI) hydrolysis in vivo, which is abrogated in mGlu5 receptors gene deleted mice[1]. VU0360172 is a click chemistry reagent, it contains an Alkyne group and can undergo copper-catalyzed azide-alkyne cycloaddition (CuAAc) with molecules containing Azide groups.

IC_{50} & Target		
	mGluR5 16 nM (EC50)	mGluR5 195 nM (Ki)

REFERENCES

[1]. Alice L Rodriguez, et al. Discovery of novel allosteric modulators of metabotropic glutamate receptor subtype 5 reveals chemical and functional diversity and in vivo activity in rat behavioral models of anxiolytic and antipsychotic activity. Mol Pharmacol. 2010 Dec;78(6):1105-23.

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

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