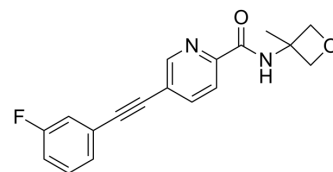


ML254

Cat. No.:	HY-16654
CAS No.:	1428630-86-7
Molecular Formula:	C ₁₈ H ₁₅ FN ₂ O ₂
Molecular Weight:	310.32
Target:	mGluR
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (322.25 mM; Need ultrasonic)					
	Preparing Stock Solutions	<div><div>Solvent</div><div>Concentration</div></div>	Mass	1 mg	5 mg	10 mg
		1 mM		3.2225 mL	16.1124 mL	32.2248 mL
		5 mM		0.6445 mL	3.2225 mL	6.4450 mL
		10 mM		0.3222 mL	1.6112 mL	3.2225 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 (8.06 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	ML254 is a potent mGlu ₅ potentiator, with EC ₅₀ and pEC ₅₀ of 9.3 nM and 8.03 nM for rat mGlu ₅ , respectively. ML254 can be used for researching schizophrenia ^[1] . ML254 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	rat mGluR5 9.3 nM (EC50)	rat mGluR5 8.03 nM (pEC50)

REFERENCES

[1]. Turlington M, Noetzel MJ, Chun A, et al. Exploration of allosteric agonism structure-activity relationships within an acetylene series of metabotropic glutamate receptor

5 (mGlu5) positive allosteric modulators (PAMs): discovery of 5-((3-fluorophenyl)ethynyl)-N-(3-methyloxetan-3-yl)picolinamide (ML254). J Med Chem. 2013;56(20):7976-7996.

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

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