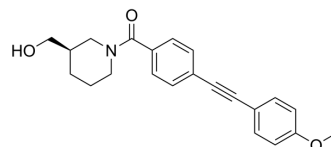


ML289

Cat. No.:	HY-19630		
CAS No.:	1382481-79-9		
Molecular Formula:	C ₂₂ H ₂₃ NO ₃		
Molecular Weight:	349.42		
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 : 250 mg/mL (715.47 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
	Preparing Stock Solutions		10 mg	
	1 mM	2.8619 mL	14.3094 mL	28.6189 mL
	5 mM	0.5724 mL	2.8619 mL	5.7238 mL
	10 mM	0.2862 mL	1.4309 mL	2.8619 mL
Please refer to the solubility information to select the appropriate solvent.				
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (5.95 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.08 mg/mL (5.95 mM); Suspended solution; Need ultrasonic Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (5.95 mM); Clear solution 			

BIOLOGICAL ACTIVITY

Description	ML289 (VU0463597) is a potent, selective, and CNS-penetrant mGlu3 (IC ₅₀ =0.66 μM) negative allosteric modulator. ML289 displays >15-fold selectivity over mGlu2 and is inactive against mGlu5 ^[1] . ML289 is a click chemistry reagent, it contains an Alkyne group and can undergo copper-catalyzed azide-alkyne cycloaddition (CuAAC) with molecules containing Azide groups.
IC₅₀ & Target	mGluR3 0.66 μM (IC ₅₀)

In Vitro

ML289 (VU0463597) is a CNS-penetrant, metabotropic glutamate receptor 3 (mGlu3) negative allosteric modulator probe^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Sheffler DJ, et al. Development of a novel, CNS-penetrant, metabotropic glutamate receptor 3 (mGlu3) NAM probe (ML289) derived from a closely related mGlu5 PAM. *Bioorg Med Chem Lett.* 2012;22(12):3921-3925.

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

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