Mavoglurant racemate

Cat. No.: HY-15257A

CAS No.: 1636881-61-2

Molecular Formula: $C_{19}H_{23}NO_3$

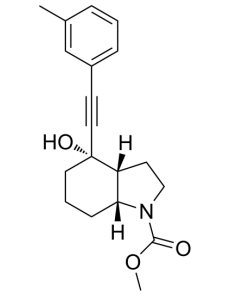
Molecular Weight: 313.39

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



relative stereochemistry

SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (159.55 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.1909 mL	15.9546 mL	31.9091 mL
	5 mM	0.6382 mL	3.1909 mL	6.3818 mL
	10 mM	0.3191 mL	1.5955 mL	3.1909 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: ≥ 1.67 mg/mL (5.33 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 1.67 mg/mL (5.33 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 1.67 mg/mL (5.33 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Mavoglurant racemate (AFQ-056 racemate) is the racemate of Mavoglurant. Mavoglurant is a novel, non-competitive mGlu5 receptor antagonist[1]. Mavoglurant (racemate) 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

In Vitro

For antagonistic activity, (−)-mavoglurant, the (−)-enantiomer shows IC_{50} of 0.11 μM and 0.03 μM (Ca^{2+} and PI-turnover)

whereas the (+)-enantiomer ((+)-10) shows only 37% and 18% inhibition at 10 μM[1].

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

REFERENCES

[1]. Vranesic I, et al. AFQ056/mavoglurant, a novel clinically effective mGluR5 antagonist: identification, SAR and pharmacological characterization. Bioorg Med Chem. 2014 Nov 1;22(21):5790-80

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