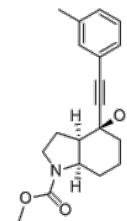


Product Name : Mavoglurant
Cat. No. : PC-49747
CAS No. : 543906-09-8
Molecular Formula : C₁₉H₂₃NO₃
Molecular Weight : 313.40
Target : mGluR
Solubility : 10 mM in DMSO



Biological Activity

AFQ056 (Mavoglurant, AFQ-056) is a potent, subtype-selective and non-competitive inhibitor of **mGluR5** with IC₅₀ of 30 nM.

AFQ056 displays >300 fold selectivity for the mGluR5 over other metabotropic family of GPCRs.

AFQ056 antagonizes hmGluR5-mediated responses with IC₅₀s of 110 and 30 nM in Ca²⁺- and PI-turnover assays in L(tk-) cells stably expressing mGluR5. AFQ056 (Mavoglurant) (0.1-10 mg/kg; a single p.o.) inhibits the stress-induced hyperthermia (SIH) in a dose-dependent manner in mice.

Fmr1 KO mice have a deficit in inhibition of the startle response after a prepulse and that AFQ056 can rescue this phenotype, shows potential for treatment of fragile X syndrome (FXS).

References

Jacquemont S, et al. *Sci Transl Med*. 2011 Jan 5;3(64):64ra1.

Ivo Vranesic, et al. *Bioorg Med Chem*. 2014 Nov 1;22(21):5790-803

Levenga J, et al. *Neurobiol Dis*. 2011 Jun;42(3):311-7.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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