FTIDC

Cat. No.: HY-100405

CAS No.: 873551-53-2

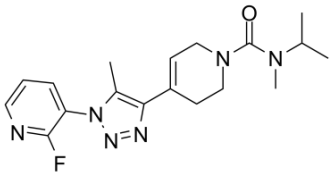
Molecular Formula: $C_{18}H_{23}FN_6O$

Molecular Weight: 358.41

Target: mGluR

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	FTIDC is an orally active, noncompetitive, selective allosteric metabotropic glutamate receptor (mGluR) 1 antagonist with an IC_{50} of 5.8 nM for human mGluR1a. FTIDC has no species differences in its antagonistic activity on recombinant human, mouse, and rat mGluR1[1].

IC_{50} & Target	mGluR1a 5.8 nM (IC_{50})	$mGlu_5$ 6200 nM (IC_{50})

In Vitro	FTIDC inhibits L-glutamate-induced increases in intracellular Ca^{2+} concentrations, with IC_{50} values of 5.8 nM , 5.8 nM , 3.1 nM , 7.7 nM for human mGluR1a, rat mGluR1a, mouse mGluR1a, human mGluR1b in CHO cells, respectively[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

FTIDC (i.p. or p.o.; 1-30 mg/kg) reduces the duration of face-washing behavior elicited in a dosedependent manner and the inhibitory effect is statistically significant at 10 and 30 mg/kg with i.p. and 30 mg/kg with p.o.[1].

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Animal Model:	Male CD1 (ICR) mice of 6-weeks-old[1]
Dosage:	1, 3, 10, and 30 mg/kg
Administration:	I.p. or p.o.
Result:	Reduced the duration of face-washing behavior elicited in a dosedependent manner and was statistically significant at 10 and 30 mg/kg with i.p. and 30 mg/kg with p.o..

REFERENCES

[1]. Suzuki G, et al. Pharmacological characterization of a new, orally active and potent allosteric metabotropic glutamate receptor 1 antagonist, 4-[1-(2-fluoropyridin-3-yl)-5-methyl-1H-1,2,3-triazol-4-yl]-N-isopropyl-N-methyl-3,6-dihydropyridine-1(2H)-carboxamide (FTIDC). J Pharmacol Exp Ther. 2007 Jun;321(3):1144-53.

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

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