Pesampator

Cat. No.: HY-112781

CAS No.: 1258963-59-5

Molecular Formula: $C_{18}H_{20}N_2O_4S_2$

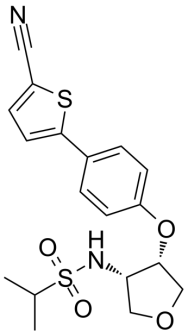
Molecular Weight: 392.49

Target: iGluR

Pathway: Membrane Transporter/Ion Channel; 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 (254.78 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.5478 mL	12.7392 mL	25.4784 mL
5 mM	0.5096 mL	2.5478 mL	5.0957 mL
10 mM	0.2548 mL	1.2739 mL	2.5478 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Pesampator (PF-04958242) is a potent and highly selective positive allosteric modulator of AMPA receptor (an AMPA potentiator) with an EC_{50} of 310 nM and a K_i of 170 nM[1].

In Vivo

Pesampator (0.1-1 mg/kg; SC) dose-dependently increases CD-1 mouse cerebellum cGMP and Pesampator (0.1-0.32 mg/kg; SC) decreases fall latency in C57BL/6J mice traversing an accelerating rotarod[1].

Pesampator (0.001-0.01 mg/kg; male Sprague-Dawley rats) reverses the MK-801-mediated (0.05 mg/kg; IV) reduction in paired-pulse facilitation (PPF) after cumulative or a single (0.01 mg/kg) intravenous dose[1].

Pesampator (0.0032–0.032 mg/kg; SC) attenuates ketamine-induced working memory disruptions in rats as determined by mean errors in a radial arm maze[1].

In rats, Pesampator (0.027, 0.08, and 0.60 mg/kg; SC) dose-dependently affectes the regional brain uptake of 2-deoxy-2-[^{18F}]fluoro-d-glucose (FDG)[1].

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

REFERENCES

[1]. Shaffer CL, et al. The discovery and characterization of the α-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid (AMPA) receptor potentiator N-{(3S,4S)-4-[4-(5-cyano-2-thienyl)phenoxy]tetrahydrofuran-3-yl}propane-2-sulfonamide (PF-04958242). J Med Chem. 2015;58(10):4291-4308.

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

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