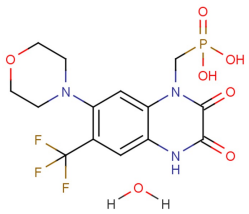
Data Sheet (Cat.No.T13405)

TargetMol
A DRUG SCREENING EXPERT

Fanapanel hydrate

Chemical Properties



CAS No.:	1255517-78-2
Formula:	C14H17F3N3O7P
Molecular Weight:	427.27
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Fanapanel hydrate is a highly selective antagonist of AMPA/kainate with little activity against NMDA(Ki of 3.2 nM, 100 nM, and 8.5 μM against quisqualate, kainate, and NMDA, respectively).
Targets(IC_{50})	AMPAR: None
In vivo	In mice, ZK200775 elevated the threshold for AMPA- and kainate-induced clonic seizures with a THRD50 (threshold dose) of 2.9 (1.7–4.6) and 1.6 (1.3–2.0) mg/kg i.v., whereas the threshold for NMDA-induced seizures was elevated only in doses, THRD50 of 24.1 (21.9–26.5) mg/kg i.v., which affected motor coordination in the rotating rod, ED50 14.6 (12.1–17.6) mg/kg. The doses of ZK200775 are 10 and 30 mg/kg (intravenously). Reduced muscle tone in hereditary spastic rats [1]. ZK200775 (3.0 but not 1.5 or 6.0 mg/kg) significantly reduced nicotine-induced (0.6 mg/kg) DA release in NACC and nicotine-stimulated LMA.ZK200775 (1.5, 3.0, 6.0 mg/kg) alone influenced neither DA release nor LMA. ZK200775 showed 34-fold selectivity for AMPA receptors compared to NMDA receptors and no affinity to nicotine receptors [2].

Solubility Information

Solubility	DMSO: 5 mg/mL (11.70 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.34 mL	11.702 mL	23.404 mL
5 mM	0.468 mL	2.34 mL	4.681 mL
10 mM	0.234 mL	1.17 mL	2.34 mL
50 mM	0.047 mL	0.234 mL	0.468 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Turski L, et al. ZK200775: a phosphonate quinoxalinedione AMPA antagonist for neuroprotection in stroke and trauma. Proc Natl Acad Sci U S A. 1998 Sep 1;95(18):10960-5.

2. Kosowski AR, et al. Nicotine-induced dopamine release in the nucleus accumbens is inhibited by the novel AMPA antagonist ZK200775 and the NMDA antagonist CGP39551. Psychopharmacology (Berl). 2004 Aug;175(1):114-23.

Tel:781-999-4286 E-mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481