Data Sheet (Cat.No.T13405)

TargetMol

Fanapanel hydrate

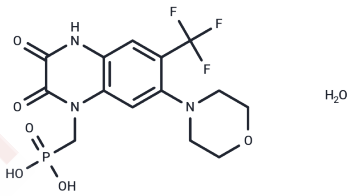
Chemical Properties

CAS No. : 1255517-78-2

Formula: C14H17F3N3O7P

Molecular Weight: 427.27

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.



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(IC50)	Others,iGluR
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., respectively, while the threshold for NMDA-induced seizures increased only at a THRD50 of 24.1 (21.9–26.5) mg/kg i.v., which affected motor coordination in the rotating rod with an ED50 of 14.6 (12.1–17.6) mg/kg. ZK200775 at doses of 10 and 30 mg/kg (intravenously) reduced muscle tone in hereditary spastic rats [1]. ZK200775 at 3.0 mg/kg, but not at 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 (11.7 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3404 mL	11.7022 mL	23.4044 mL
5 mM	0.4681 mL	2.3404 mL	4.6809 mL
10 mM	0.234 mL	1.1702 mL	2.3404 mL
50 mM	0.0468 mL	0.234 mL	0.4681 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

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.
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.