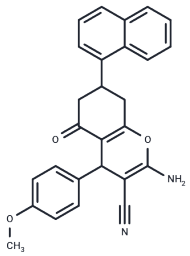
Data Sheet (Cat.No.T4138)

TargetMol

UCPH-101

Chemical Properties



CAS No. : 1118460-77-7

Formula: C27H22N2O3

Molecular Weight: 422.48

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	UCPH-101 is an inhibitor of excitatory amino acid transporter subtype 1 (EAAT1) with an IC50 of 0.66 μM.
Targets(IC50)	transporter
In vitro	Preincubation with 100 μM UCPH-101 results in a notable reduction in the expression levels of HA-EAAT1 and HA-GLAST. Additionally, UCPH-101 and UCPH-102 exhibit concentration-dependent inhibition of EAAT1 anion currents, with dissociation constant (KD) values of 0.34±0.03 μM (Hill=1.3±0.13, n≥9) for UCPH-101 and 0.17±0.02 μM (Hill=0.97±0.11, n≥7) for UCPH-102.

Solubility Information

Solubility	DMSO: 18.85 mg/mL (44.62 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.73 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.367 mL	11.8349 mL	23.6698 mL
5 mM	0.4734 mL	2.367 mL	4.734 mL
10 mM	0.2367 mL	1.1835 mL	2.367 mL
50 mM	0.0473 mL	0.2367 mL	0.4734 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

Abrahamsen B, et al. Allosteric modulation of an excitatory amino acid transporter: the subtype-selective inhibitor UCPH-101 exerts sustained inhibition of EAAT1 through an intramonomeric site in the trimerization domain. J Neurosci. 2013 Jan 16;33(3):1068-87.