Inhibitors

MCE ® MedChemExpress

UCPH-102

 Cat. No.:
 HY-118858

 CAS No.:
 1229591-56-3

 Molecular Formula:
 $C_{21}H_{18}N_2O_2$

 Molecular Weight:
 330.38

Target: EAAT

Pathway: Membrane Transporter/Ion Channel

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

Analysis.

BIOLOGICAL ACTIVITY

Description	UCPH-102 is a highly selective EAAT1 inhibitor with an IC $_{50}$ of 0.43 μ M. UCPH-102 exhibits a specific anti-proliferative effect on T-ALL cells. UCPH-102 also shows good blood-brain permeability, which can be used in studies of amyotrophic lateral sclerosis, Alzheimer's disease, chronic pain and obsessive compulsive disorder ^{[1][2][3][4]} .
IC ₅₀ & Target	EAAT1

REFERENCES

[1]. Huynh TH, et al. Design, synthesis and pharmacological characterization of coumarin-based fluorescent analogs of excitatory amino acid transporter subtype 1 selective inhibitors, UCPH-101 and UCPH-102. Bioorg Med Chem. 2012 Dec 1;20(23):6831-9.

[2]. Haym I, et al. Bioavailability Studies and in vitro Profiling of the Selective Excitatory Amino Acid Transporter Subtype 1 (EAAT1) Inhibitor UCPH-102. ChemMedChem. 2016 Feb 17;11(4):403-19.

[3]. Stanulović V S, et al. Proliferation and Survival of T-cell Acute Lymphoblastic Leukaemia Depends on mTOR-regulated Glutamine Uptake and EAAT1-dependent Conversion of Glutamine to Aspartate and Nucleotides. bioRxiv. 2020.

[4]. 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.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA