Hello Bio, Inc.
304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500
F. 609-228-4994

customercare-usa@hellobio.com

DATASHEET

UBP714 ammonium salt

Product overview

Name	UBP714 ammonium salt
Cat No	HB8161
Alternative names	UBP-714, UBP 714
Biological action	PAM
Purity	>98%
Description	NMDAR PAM which potentiates GluN2A and GluN2B with minimal effects on 2C and 2D.

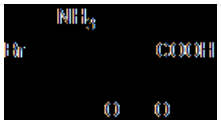
Biological Data

Biological description	NMDAR PAM which potentiates GluN2A and GluN2B NMDAR subunits with minimal effects on GluN2C and GluN2D. Potentiates NMDAR mediated fEPSPs (field excitatory postsynaptic potentials) but not AMPAR mediated fEPSPs in the CA1 region of the hippocampus. Potentiates sub-maximal LTP and reduces LTD.

Solubility & Handling

Solubility overview	Soluble in water (50 mM)
Storage instructions	+4°C
Storage of solutions	Prepare and use solutions on the same day if possible. Store solutions at -20°C for up to one month if storage is required. Equilibrate to RT and ensure the solution is precipitate free before use.
Shipping Conditions	Stable for ambient temperature shipping. Follow storage instructions on receipt.
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use

Chemical Data

Chemical name	6-Bromo-4-methyl-2-oxo-2H-1-benzopyran-3-carboxylic acid ammonium salt
Molecular Weight	283.07
Chemical structure	
Molecular Formula	$C_{11}H_7BrO_4.NH_3$
CAS Number	773109-55-0
PubChem identifier	56650009
SMILES	CC1=C(C(=O)OC2=C1C=C(C=C2)Br)C(=O)O
InChi	InChI=1S/C11H7BrO4/c1-5-7-4-6(12)2-3-8(7)16-11(15)9(5)10(13)14/h2-4H,1H3,(H,13,14)
InChiKey	BWBWVUJRXNIUMA-UHFFFAOYSA-N
Appearance	Off-white solid

References

Coumarin-3-carboxylic acid derivatives as potentiators and inhibitors of recombinant and native N-methyl-D-aspartate receptors

Irvine et al (2012) Neurochem Int. 61(4)
PubMedID 22265875

Positive and Negative Allosteric Modulators of N-Methyl-d-aspartate (NMDA) Receptors: Structure-Activity Relationships and Mechanisms of Action

Burnell et al (2019) J Med Chem. 62(1)
PubMedID 29446949

Mechanism and properties of positive allosteric modulation of N-methyl-d-aspartate receptors by 6-alkyl 2-naphthoic acid derivatives

Sapkota et al (2017) Neuropharmacology 125:
PubMedID 28709671

Differential regulation of STP, LTP and LTD by structurally diverse NMDA receptor subunit-specific positive allosteric modulators

France et al (2022) Neuropharmacology 202:108840
PubMedID 34678377