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

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

customercare-usa@hellobio.com

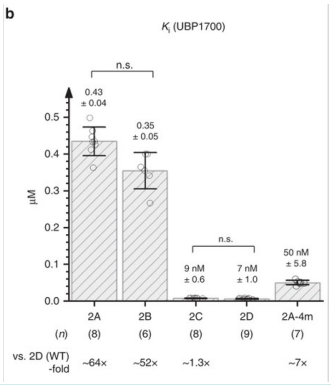
DATASHEET

UBP1700

Product overview

Name	UBP1700
Cat No	HB8172
Alternative names	UBP 1700
Biological action	Antagonist
Purity	>95%
Description	Highly potent, selective GluN2C/2D NMDAR antagonist

Images



Biological Data

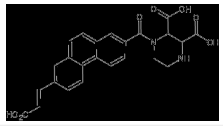
Biological description	Highly potent and selective GluN2C/2D NMDAR antagonist (K_i values are 9 nM and 7 nM at GluN2C and GluN2D respectively). PPDA derivative. UBP1700 is one of the most potent GluN2 antagonists reported to date which shows ~50 to 60 fold selectivity for GluN2C/2D over GluN2A and ~40 to 50 fold selectivity for GluN2C/2D over GluN2B subunits. UBP1700 displays similar selectivity for GluN2C/2D as QNZ46 and DQP-1105 but has higher potency, thus is likely to inhibit receptors more effectively than these compounds where Glu2D-containing NMDARs are located (e.g. peri- and extrasynaptic spaces).

Solubility & Handling

Storage instructions	Room temperature
Solubility overview	Soluble in DMSO (100 mM), in water with 1eq NaOH (50 mM) and in basic aqueous buffer (50 mM)
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	3-{8-[(E)-2-carboxyethenyl]naphthoyl}piperazine-2,3-dicarboxylic acid
Molecular Weight	448.4248
Chemical structure	



Molecular Formula	$C_{24}H_{20}N_2O_7$
SMILES	O=C(c2cc3ccc1cc(/C=C/C(=O)O)ccc1c3cc2)N4CCNC(C(=O)O)C4C(=O)O
InChi	InChI=1S/C24H20N2O7/c27-19(28)8-2-13-1-6-17-14(11-13)3-4-15-12-16(5-7-18(15)17)22(29)26-10-9-25-20(23(30)31)21(26)24(32)33/h1-8,11-12,20-21,25H,9-10H2,(H,27,28)(H,30,31)(H,32,33)/b8-2+
InChiKey	INDGTGVUFQRYLI-KRXBUXKQSA-N
Appearance	Off-white solid

References

Structural basis of subtype-selective competitive antagonism for GluN2C/2D-containing NMDA receptors.

Wang JX et al (2020) Nature communications 11

PubMedID 31969570