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DATASHEET

UBP1700

Product overview

 Name
 UBP1700

 Cat No
 HB8172

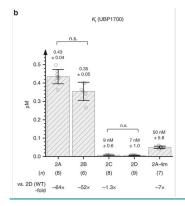
 Alternative names
 UBP 1700

 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).

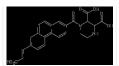
Solubility & Handling

Storage instructions Solubility overview Important Room temperature

Soluble in DMSO (100 mM), in water with 1eq NaOH (50 mM) and in basic aqueous buffer (50 mM) 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 Molecular Weight Chemical structure $3-\{8-[(E)-2\text{-carboxyethenyl}] naphthoyl\} piperazine-2,3-dicarboxylic acid <math display="inline">448.4248$



Molecular Formula

SMILES InChi $\begin{array}{l} C_{24}H_{20}N_2O_7 \\ O = C(c2cc3ccc1cc(/C = C/C(=O)O)ccc1c3cc2)N4CCNC(C(=O)O)C4C(=O)O \end{array}$

InChl=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)/b8-2-10H2,(H,27,28)(H,32,31

+

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