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DATASHEET

CGP 78608 hydrochloride

Product overview

Name	CGP 78608 hydrochloride
Cat No	HB0187
Alternative names	PAMQX
Biological action	Antagonist
Purity	>98%
Description	Selective, competitive GluN1 NMDAR receptor antagonist. Enhances GluN1/3 activation.

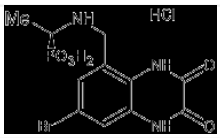
Biological Data

Biological description	Selective and competitive GluN1 NMDAR receptor antagonist which shows preference for the GluN1 glycine binding site (IC_{50} = 5 nM). CGP-78608 prevents glycine binding to GluN1 (but not to GluN3) to strongly reduce receptor desensitization, and enhance GluN1/3A receptor activation. Used to unmask GluN1/GluN3A excitatory glycine NMDA receptors and to demonstrate that excitatory glycine GluN1/GluN3A NMDARs are functionally expressed in native neurons (at least in the juvenile brain). Also displays anticonvulsant properties.

Solubility & Handling

Storage instructions	Room temperature
Solubility overview	Soluble in NaOH(aq) (50mM, gentle warming)
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	[(1*S*)-1-[[(7-Bromo-1,2,3,4-tetrahydro-2,3-dioxo-5-quinoxalinyl)methyl]amino]ethyl]phosphonic acid hydrochloride
Molecular Weight	414.58
Chemical structure	
Molecular Formula	$C_{11}H_{13}BrN_3O_5P.HCl$
CAS Number	1135278-54-4
PubChem identifier	24978530
SMILES	O=C2C(NC1=CC(Br)=CC(CN[C@@H]([P@](O)(O)=O)C)=C1N2)=O.Cl
InChiKey	MZQQZBPMRPDKTB-JEDNCBNOSA-N

References

N-phosphonoalkyl-5-aminomethylquinoxaline-2,3-diones: in vivo active AMPA and NMDA(glycine) antagonists.

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