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DATASHEET

uPSEM792 hydrochloride

Product overview

uPSEM792 hydrochloride Name

Cat No HB8542 **Biological action** Agonist >99% **Purity**

Description Ultrapotent PSEM agonist for PSAM⁴-GlyR and PSAM⁴-5HT3. Brain penetrant.

Biological Data

Biological description Overview

Ultrapotent PSEM agonist for PSAM4-GlyR and PSAM4-5HT3 (K, values are 0.7 nM and 10,000-fold agonist selectivity for PSAM⁴-GlyR over α -7-GlyR, α 7-5HT3R and 5-HT3R.

uPSEM792 is a very weak agonist at α4β2 nAChR and shows 230-fold selectivity for PSAM⁴-GlyR over a4\beta2 nAChR.

It retains the potency of varenicline for PSAM⁴-GlyR with enhanced chemogenetic selectivity.

It does not act as a P-glycoprotein pump (PgP) substrate.

Uses and applications

It strongly suppresses layer 2/3 cortical neurons expressing PSAM⁴-GlyR in brain slices at low concentrations (ranging from 1-15 nM).

Solubility & Handling

Storage instructions Solubility overview

Important

-20°C

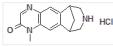
Soluble in water (100 mM)

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 1-Methyl-7,8,9,10-tetrahydro-1H-6,10-methanoazepino[4,5-g]quinoxalin-2(6H)-one hydrochloride 277.75



Molecular Formula **CAS Number PubChem identifier**

SMILES InChi

 $C_{14}H_{15}\overline{N_3O\cdot HCI}$ 2341841-08-3 138991792

CN1C2=C(C=C3C4CC(C3=C2)CNC4)N=CC1=O.Cl

InChI=1S/C14H15N3O.CIH/c1-17-13-4-11-9-2-8(5-15-6-9)10(11)3-12(13)16-7-14(17)18;/h3-4,7-9,15

H,2,5-6H2,1H3;1H

InChiKey Appearance Licensing details CDHPEJUYEXNGCV-UHFFFAOYSA-N

Yellow solid

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References

Ultrapotent chemogenetics for research and potential clinical applications.

Magnus CJ *et al* (2019) Science 364(6436) **PubMedID**30872534