

DATASHEET

uPSEM817 tartrate

Product overview

Name	uPSEM817 tartrate
Cat No	HB8620
Biological action	Agonist
Purity	>99%
Description	Selective, ultrapotent PSEM agonist for PSAM ⁴ -GlyR and PSAM ⁴ -5HT3. Brain penetrant.

Biological Data

Biological description

Overview

Selective, ultrapotent PSEM agonist for PSAM⁴-GlyR and PSAM⁴-5HT3 (K_i values are 0.15 nM and EC₅₀ = 0.3 nM at PSAM⁴-GlyR) which can be used for targeted control of brain activity in rodent and primate models.

It has excellent selectivity with 5000- to 10,000-fold selectivity for PSAM⁴-GlyR over α-7-GlyR, α7-5HT3R and 5-HT3R. It also does not show evident α4β2 nAChR agonism up to 30 μM.

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

-20 °C

Storage buffer

Soluble in DMSO (100 mM), and in water (50 mM, gentle warming)

Shipping conditions

ambient

Important

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use

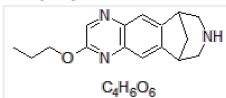
Chemical Data

Chemical name

2-Propoxy-7,8,9,10-tetrahydro-6H-6,10-methanoazepino[4,5-g]quinoxaline L-tartrate

Molecular Weight

419.43



Chemical structure

C₁₆H₁₉N₃O₂C₄H₆O₆

Molecular Formula

C₁₆H₁₉N₃O₂C₄H₆O₆

CAS Number

2341833-14-3

PubChem identifier

138991793

SMILES

CCCOC1=NC2=C(N=C1)C=C(C3=C2)C4CNCC3C4.O[C@@H](C(O)=O)[C@@H](O)C(O)=O

Source

Synthetic

InChi

InChI=1S/C16H19N3O.C4H6O6/c1-2-3-20-16-9-18-14-5-12-10-4-11(8-17-7-10)13(12)6-15(14)19-1

Chemical name	2-Propoxy-7,8,9,10-tetrahydro-6H,6,10-methanoazepino[4,5-g]quinoxaline L-tartrate
InChiKey	6;5-1(3(7)8)2(6)4(9)10/h5-6,9-11,17H,2-4,7-8H2,1H3;1-2,5-6H,(H,7,8)(H,9,10)/t;1-,2-/m.1/s1
Appearance	ATMVSWRWVDLFOP-LREBCSMRSA-N
Licensing details	Off-white solid Sold under license from the Howard Hughes Medical Institute, Janelia Research Campus. For scientific research use only. This product may not be used to research, develop, make, use, offer to sell, sell, or import any products for human therapeutic uses.

References

Ultrapotent chemogenetics for research and potential clinical applications.

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

PubMedID [30872534](#)
