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DATASHEET

Sipatrigine

Product overview

Name	Sipatrigine
Cat No	HB1032
Alternative names	619C89
Biological action	Blocker
Purity	>98%
Description	Na^+ / Ca^+ channel blocker

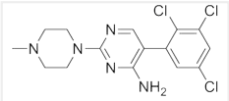
Biological Data

Biological description	Na^+, Ca^+ channel blocker (IC_{50} = 10 µM for R type Ca^{2+} channel currents). Also acts as TREK-1 antagonist and inhibits glutamate release. Analog of lamotrigine. Displays neuroprotective and antidepressant properties.

Solubility & Handling

Storage instructions	Room temperature
Solubility overview	Soluble in DMSO (100mM) or ethanol (25mM)
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-(4-Methyl-1-piperazinyl)-5-(2,3,5-trichlorophenyl)-4-pyrimidinamine
Molecular Weight	372.68
Chemical structure	
Molecular Formula	$C_{15}H_{16}Cl_3N_5$
CAS Number	130800-90-7
PubChem identifier	60803
SMILES	ClC1=CC(Cl)=C(Cl)C(C2=C(N)N=C(N3CCN(C)CC3)N=C2)=C1
InChi	InChI=1S/C15H16Cl3N5/c1-22-2-4-23(5-3-22)15-20-8-11(14(19)21-15)10-6-9(16)7-12(17)13(10)18/h6-8H,2-5H2,1H3,(H2,19,20,21)
InChiKey	PDOCBJADCWMDGL-UHFFFAOYSA-N
MDL number	MFCD00867772

References

The neuroprotective agent sipatrigine blocks multiple cardiac ion channels and causes triangulation of the ventricular action potential.

Gao Z *et al* (2005) Clin Exp Pharmacol Physiol 32(12)
PubMedID 16445575

BW619C89, a glutamate release inhibitor, protects against focal cerebral ischemic damage.

Leach MJ *et al* (1993) Stroke 24(7)
PubMedID 8100654

Sipatrigine could have therapeutic potential for major depression and bipolar depression through antagonism of the two-pore-domain K+ channel TREK-1.

Tsai SJ (2008) Med Hypotheses 70(3)
PubMedID 17703894

Actions of sipatrigine, 202W92 and lamotrigine on R-type and T-type Ca2+ channel currents.

Hainsworth AH *et al* (2003) Eur J Pharmacol 467(1-3)
PubMedID 12706458