DATASHEET
(-)-Huperzine A

Product overview

Name: (-)-Huperzine A
Cat No: HB0001
Alternative names: Hup A.
Biological action: Inhibitor
Purity: >97%
Description: AChE inhibitor / NMDA receptor antagonist

Biological Data

Biological description: Acetylcholinesterase inhibitor ($K_i = 6.2$ nM). Also NMDA receptor antagonist ($K_i = 6$ μM at PCP site). Blood brain barrier permeable. Promotes hippocampal neurogenesis. Displays potent antinociceptive and anticonvulsant properties. Also shows positive effects on improving cognitive and behavioural functions.

Solubility & Handling

Storage instructions: +4°C (desiccate)
Solubility overview: Soluble in DMSO or Ethanol
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: (1R,9S,13E)-1-Amino-13-ethylidene-11-methyl-6-azatricyclo[7.3.1.0^2,7]trideca-2(7),3,10-trien-5-one
Molecular Weight: 242.32
Molecular Formula: C_{15}H_{18}N_{2}O
CAS Number: 102518-79-6
PubChem identifier: 907504
SMILES: CC=C1C2CC3=C(C1(CC(=C2)C)N)C=CC(=O)N3

References

Huperzine A promotes hippocampal neurogenesis in vitro and in vivo.
Ma T et al (2013) Brain Res 1506
PubMedID: 23454433

Intrathecal huperzine A increases thermal escape latency and decreases flinching behavior in the formalin test in rats.
The NMDA receptor ion channel: a site for binding of Huperzine A.
PubMedID 20026382

Identification of amino acid residues involved in the binding of Huperzine A to cholinesterases.
PubMedID 7849595