## Product overview

**Name**  
(-)-Huperzine A

**Cat No**  
HB0001

**Short description**  
AChE inhibitor / NMDA receptor antagonist

**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.

**Alternative names**  
Hup A

**Biological action**  
Inhibitor

**Purity**  
>97%

## Properties

**Chemical name**  
(1$R,9S,13E$)-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

**Chemical structure**

![Chemical structure diagram](image)

**Molecular Formula**  
$C_{15}H_{18}N_2O$

**CAS Number**  
102518-79-6

**PubChem identifier**  
907504

**SMILES**  
CC=C1C2CC3=C(C1(CC(=C2)C)N)C=CC(=O)N3

## Storing and Using Your Product

**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.

## References for (-)-Huperzine A

### Huperzine A promotes hippocampal neurogenesis in vitro and in vivo.


**PubMedID:**  
23454433
Intrathecal huperzine A increases thermal escape latency and decreases flinching behavior in the formalin test in rats.


PubMedID: 20026382

The NMDA receptor ion channel: a site for binding of Huperzine A.


PubMedID: 11920920

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


PubMedID: 7849595