

# PRODUCT INFORMATION



## (-)-Huperzine A

Item No. 14620

**CAS Registry No.:** 102518-79-6  
**Formal Name:** (5R,9R,11E)-5-amino-11-ethylidene-5,6,9,10-tetrahydro-7-methyl-5,9-methanocycloocta[b]pyridin-2(1H)-one

**Synonyms:** Hup A, (-)-Selagine

**MF:** C<sub>15</sub>H<sub>18</sub>N<sub>2</sub>O

**FW:** 242.3

**Purity:** ≥98%

**UV/Vis.:** λ<sub>max</sub>: 231, 313 nm

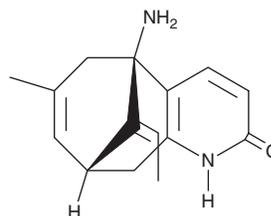
**Supplied as:** A crystalline solid

**Storage:** -20°C

**Stability:** ≥4 years

**Special Conditions:** Store in a dry, dark area

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.



### Laboratory Procedures

(-)-Huperzine A is supplied as a crystalline solid. A stock solution may be made by dissolving the (-)-huperzine A in the solvent of choice. (-)-Huperzine A is soluble in the organic solvents methanol and DMSO. The solubility of (-)-huperzine A in these solvents is approximately 1 and 20 mg/ml, respectively.

### Description

(-)-Huperzine A is a natural sesquiterpene alkaloid first isolated from *Huperzia*, a club moss used in Chinese medicine for its neuroprotective activity.<sup>1</sup> It inhibits acetylcholinesterase (AChE) in rat cortex *in vitro* (IC<sub>50</sub> = 82 nM) and displays oral AChE inhibitory activity in animals.<sup>1</sup> (-)-Huperzine A has potential applications in a variety of neuroprotective roles, including protection against organophosphate nerve agents and ameliorating symptoms of Alzheimer's disease.<sup>1,2</sup>

### References

1. Tun, M.K.M. and Herzon, S.B. The pharmacology and therapeutic potential of (-)-huperzine A. *J. Exp. Pharmacol.* 4, 113-123 (2012).
2. Yang, G., Wang, Y., Tian, J., *et al.* Huperzine A for Alzheimer's disease: A systematic review and meta-analysis of randomized clinical trials. *PLoS One* 8(9), (2013).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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