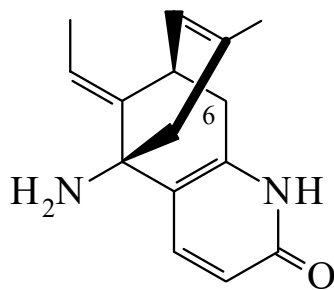




>>Entry Name: Huperzine A

Synonym(s): Selagine. Fordine. Isoselagine



CAS Registry Number: 102518-79-6

Related CAS Registry Numbers(s): 103735-86-0 120786-18-7 130791-77-4 132435-40-6

Molecular Formula: C₁₅H₁₈N₂O

Molecular Weight: 242.32

Accurate Mass: 242.141913

Percentage Composition: C 74.35%; H 7.49%; N 11.56%; O 6.60%

Biological Source: Alkaloid from *Lycopodium serratum* (= *Huperzia serrata*), *Lycopodium selago*, *Lycopodium saururus*, *Lycopodium erythraeum* and *Lycopodium gnidioides* (Lycopodiaceae)

Biological Use/Importance: Shows very strong anticholinesterase activity and markedly increases efficiency for learning and memory in animals. Currently under clinical investigation in China for treatment of myasthenia gravis and Alzheimer's disease

Melting Point: Mp 230° (224-226°, 214-215°)

Optical Rotation: [α]_D²⁴ -150.4 (c, 0.498 in MeOH). [α]_D -99

UV: [neutral] $\lambda_{\max}$ 231 (ϵ 10200); 313 (ϵ 7760) (EtOH) (Derep)

Sigma: H5902

>>Derivative: 6 β -Hydroxy

Synonym(s): 6 β -Hydroxyhuperzine A

CAS Registry Number: 125295-13-8

Molecular Formula: C₁₅H₁₈N₂O₂

Molecular Weight: 258.319

Accurate Mass: 258.136828

Percentage Composition: C 69.75%; H 7.02%; N 10.84%; O 12.39%

Biological Source: Minor alkaloid from *Lycopodium selago* (Lycopodiaceae)

Physical Description: Cryst. (Me₂CO/MeOH)

Melting Point: Mp 207-210°

Optical Rotation: [α]_D -206 (c, 0.37 in MeOH)

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