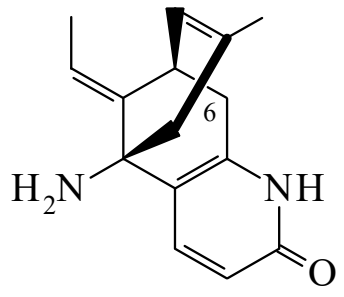
>>**Entry Name: Huperzine A**
Synonym(s): Selagine. Fordine. Isoselagine



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: $C_{15}H_{18}N_2O$
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: $[\alpha]_D^{24}$ –150.4 (c, 0.498 in MeOH). $[\alpha]_D$ –99
UV: [neutral] λ_{max} 231 (ε 10200); 313 (ε 7760) (EtOH) (Derep)

Sigma: H5902

>>**Derivative:** 6β-Hydroxy
Synonym(s): 6β-Hydroxyhuperzine A

CAS Registry Number: 125295-13-8

Molecular Formula: $C_{15}H_{18}N_2O_2$
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. (Me_2CO/MeOH)
Melting Point: Mp 207-210°
Optical Rotation: $[\alpha]_D$ –206 (c, 0.37 in MeOH)

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