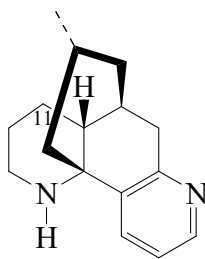




>>Entry Name: Lycodine



Absolute
Configuration

CAS Registry Number: 20316-18-1

Molecular Formula: $C_{16}H_{22}N_2$

Molecular Weight: 242.363

Accurate Mass: 242.178298

Percentage Composition: C 79.29%; H 9.15%; N 11.56%

Biological Source: Alkaloid from *Lycopodium annotinum*, *Lycopodium clavatum*, *Lycopodium fawcettii*, *Lycopodium obscurum*, *Lycopodium flabelliforme*, *Lycopodium lucidulum*, *Lycopodium serratum* var. *thunbergii* and *Lycopodium magellanicum* (Lycopodiaceae)

Melting Point: Mp 118°

Optical Rotation: $[\alpha]_D -10$ (c, 1 in EtOH)

>>Derivative: Dipicrate

Melting Point: Mp 229-233 dec.°

>>Derivative: N-Ac, picrate

Melting Point: Mp 180-182.5°

>>Derivative: N-Me

Synonym(s): N-Methyllycodine

CAS Registry Number: 54301-02-9

Molecular Formula: $C_{17}H_{24}N_2$

Molecular Weight: 256.39

Accurate Mass: 256.193948

Percentage Composition: C 79.64%; H 9.43%; N 10.93%

Biological Source: Alkaloid from *Lycopodium complanatum*, *Lycopodium erythraeum* and *Lycopodium magellanicum* (Lycopodiaceae)

Physical Description: Cryst. (Me₂CO)

Melting Point: Mp 91-92° (87-88°)

>>Derivative: 11R-Hydroxy

Synonym(s): 11-Hydroxylycodine

Molecular Formula: $C_{16}H_{22}N_2O$

Molecular Weight: 258.363

Accurate Mass: 258.173213

Percentage Composition: C 74.38%; H 8.58%; N 10.84%; O 6.19%

Biological Source: Alkaloid from *Lycopodium complanatum*

Biological Use/Importance: Cytotoxic

Physical Description: Amorph. solid

Optical Rotation: $[\alpha]_D -47$ (c, 0.5 in MeOH)

UV: [neutral] λ_{max} 269 (ϵ 3500) (MeOH)

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Nakashima, T.T. *et al.*, *Can. J. Chem.*, 1975, **53**, 1936, (*cmr*)
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Kleinman, E. *et al.*, *Tet. Lett.*, 1979, 4125, (*synth*)
Heathcock, C.H. *et al.*, *J.A.C.S.*, 1982, **104**, 1054, (*synth*)
Kobayashi, J. *et al.*, *J.O.C.*, 2001, **64**, 5901-5904, (*11-Hydroxylycodine*)