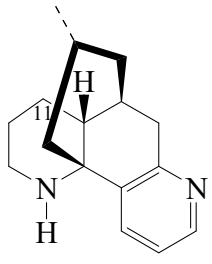
>>**Entry Name: Lycodine**



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. (Me_2CO)
Melting Point: Mp 91-92° (87-88°)

>>**Derivative:** 11*R*-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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Kleinman, E. *et al.*, *Tet. Lett.*, 1979, 4125, *(synth)*
Heathcock, C.H. *et al.*, *J.A.C.S.*, 1982, **104**, 1054, *(synth)*
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