



Optical Rotation: $[\alpha]_{\text{D}} -76$ (EtOH)

>>Derivative: O^6,N -Di-Me

Synonym(s): *N*-Methylcoclaurine

CAS Registry Number: 5096-70-8

Molecular Formula: $\text{C}_{18}\text{H}_{21}\text{NO}_3$

Molecular Weight: 299.369

Accurate Mass: 299.152144

Percentage Composition: C 72.22%; H 7.07%; N 4.68%; O 16.03%

Biological Source: Alkaloid from *Phyllica rogersii* (Rhamnaceae)

Use/Importance: Weak neuromuscular inhibitor

Melting Point: Mp 182-183°

Optical Rotation: $[\alpha]_{\text{D}} -80$ (c, 0.17 in EtOH). $[\alpha]_{\text{D}} -62$ (c, 0.13 in CHCl_3)

Other Data: Remarkably (+)-Coclaurine forms a (–)-*N*-methyl deriv.

>>Derivative: O^7 -Me

Synonym(s): Isococlaurine

CAS Registry Number: 574-75-4

Molecular Formula: $\text{C}_{17}\text{H}_{19}\text{NO}_3$

Molecular Weight: 285.342

Accurate Mass: 285.136494

Percentage Composition: C 71.56%; H 6.71%; N 4.91%; O 16.82%

Biological Source: Alkaloid occurring to small extent in commercial *Radix pareirae* *bravae*

Physical Description: Plates (MeOH)

Melting Point: Mp 216-217°

Optical Rotation: $[\alpha]_{\text{D}} +12$ (MeOH)

>>Derivative: O^7 -Me, hydrochloride

Physical Description: Plates + $1\text{H}_2\text{O}$ (H_2O)

Melting Point: Mp 175-176°

Optical Rotation: $[\alpha]_{\text{D}} +28$ (H_2O). $[\alpha]_{\text{D}} +16$ (MeOH)

>>Derivative: O^6,O^7 -Di-Me

>>Derivative: O^6,N,N -Tri-Me

Synonym(s): (–)-Magnocurarine

CAS Registry Number: 6801-40-7

Molecular Formula: $\text{C}_{19}\text{H}_{24}\text{NO}_3^{(+)}$

Molecular Weight: 314.404

Accurate Mass: 314.175619

Percentage Composition: C 72.58%; H 7.69%; N 4.46%; O 15.27%

Biological Source: Alkaloid from *Magnolia obovata* and several other *Magnolia* spp. and from *Michelia fuscata* (Magnoliaceae)

Use/Importance: Curarising and ganglionic blocking agent. Hypotensive

Melting Point: Mp 199-200° (as chloride)

Optical Rotation: $[\alpha]_{\text{D}} -91$ (H_2O)

>>Derivative: O^7,N,N -Tri-Me

Synonym(s): Lotusine

CAS Registry Number: 6871-67-6

Molecular Formula: $\text{C}_{19}\text{H}_{24}\text{NO}_3^{(+)}$

Molecular Weight: 314.404

Accurate Mass: 314.175619

Percentage Composition: C 72.58%; H 7.69%; N 4.46%; O 15.27%

Biological Source: Quaternary alkaloid from the embryo of *Nelumbo nucifera* and from *Tiliacora racemosa* (Nelumbonaceae)

Melting Point: Mp 213-215° (as chloride)

Optical Rotation: $[\alpha]_{\text{D}} -15$ (MeOH) (chloride)

Other Data: Another natural product (cyanogenic glycoside) reported in 1901 and named Lotusin was erroneous