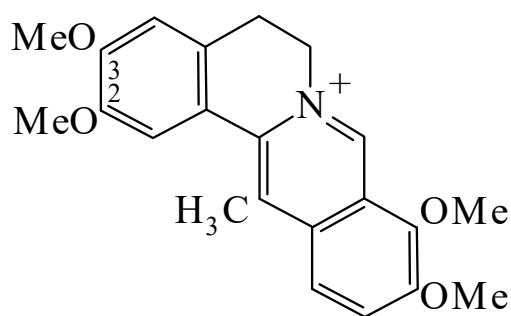




>>Entry Name: Dehydrocorydaline



CAS Registry Number: 30045-16-0

Molecular Formula: C₂₂H₂₄NO₄⁽⁺⁾

Molecular Weight: 366.436

Accurate Mass: 366.170534

Percentage Composition: C 72.11%; H 6.60%; N 3.82%; O 17.46%

Biological Source: Quaternary alkaloid from *Corydalis ambigua* and several other *Corydalis* spp. and from *Berberis floribunda* (Fumariaceae, Berberidaceae)

Use/Importance: Shows strong gastric antisecretory and antiulcer activity. Uterine contractant

>>Derivative: Chloride

Molecular Formula: C₂₂H₂₄ClNO₄

Molecular Weight: 401.889

Accurate Mass: 401.139386

Percentage Composition: C 65.75%; H 6.02%; Cl 8.82%; N 3.49%; O 15.92%

Melting Point: Mp 170-180°

>>Derivative: Nitrate

Molecular Formula: C₂₂H₂₄N₂O₇

Molecular Weight: 428.441

Accurate Mass: 428.158353

Percentage Composition: C 61.68%; H 5.65%; N 6.54%; O 26.14%

Melting Point: Mp 237°

>>Derivative: O²-De-Me

Synonym(s): 13-Methylcolumbamine

CAS Registry Number: 137760-67-9

Molecular Formula: C₂₁H₂₂NO₄⁽⁺⁾

Molecular Weight: 352.409

Accurate Mass: 352.154884

Percentage Composition: C 71.57%; H 6.29%; N 3.97%; O 18.16%

Biological Source: Alkaloid from *Corydalis solida* ssp. *brachyloba*

>>Derivative: O³-De-Me

Synonym(s): Dehydrocorybulbine

CAS Registry Number: 59870-72-3

Molecular Formula: C₂₁H₂₂NO₄⁽⁺⁾

Molecular Weight: 352.409

Accurate Mass: 352.154884

Percentage Composition: C 71.57%; H 6.29%; N 3.97%; O 18.16%

Biological Source: Quaternary alkaloid from *Corydalis turtchanovii* f. *yahusuo*

Physical Description: Yellow solid (as chloride)

Melting Point: Mp 188-190° (chloride)

References:

- Späth, E. *et al.*, *Ber.*, 1921, **54**, 3074, (*struct*)
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Tani, C. *et al.*, *Yakugaku Zasshi*, 1970, **90**, 407, (*Dehydrocorybulbine*)
Slavik, J. *et al.*, *Coll. Czech. Chem. Comm.*, 1979, **44**, 2261, (*isol*)
Bhakuni, D.S. *et al.*, *Alkaloids (N.Y.)*, 1986, **28**, 168, (*pharmacol*)
Sener, B. *et al.*, *J. Chem. Soc. Pak.*, 1991, **13**, 63; *CA*, **116**, 3548j, (*13-Methylcolumbamine*)