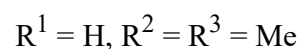
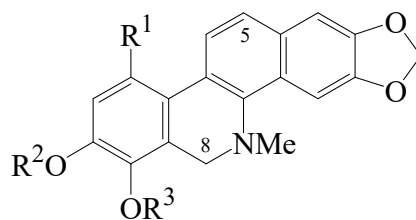




>>Entry Name: Dihydrochelerythrine

Synonym(s): 12,13-Dihydro-1,2-dimethoxy-12-methyl[1,3]benzodioxolo[5,6-*c*]phenanthridine, 9Cl. Toddalinine. Dihydrotoddaline



CAS Registry Number: 6880-91-7

Molecular Formula: C₂₁H₁₉NO₄

Molecular Weight: 349.385

Accurate Mass: 349.131409

Percentage Composition: C 72.19%; H 5.48%; N 4.01%; O 18.32%

Biological Source: Alkaloid widely distributed in the Papaveraceae (e.g. *Argemone mexicana*, *Chelidonium majus*, *Glaucium flavum* var. *vestitum*, *Glaucium vitellinum*), Rutaceae (e.g. *Fagara chalybea*, *Fagara holstii*, *Fagara semiarticulatum*, *Fagara rubescens*, *Fagara macrophylla*, *Toddalia aculeata*, *Toddalia asiatica*, *Zanthoxylum tsihanimposa*, *Zanthoxylum senegalense*, *Zanthoxylum coriaceum*, *Zanthoxylum elephantiasis*) and Fumariaceae (*Corydalis ledebouriana*)

Physical Description: Cryst. (EtOH, C₆H₆, or CHCl₃/MeOH)

Melting Point: Mp 169-171° (161-162°, 164-165°)

Other Data: Probably an artifact

>>Derivative: 8-Hydroxy

see 8-Hydroxydihydrochelerythrine, [LLR91-W](#)

>>Derivative: 5-Methoxy

Synonym(s): 5-Methoxydihydrochelerythrine. 12-Methoxydihydrochelerythrine

Molecular Formula: C₂₂H₂₁NO₅

Molecular Weight: 379.412

Accurate Mass: 379.141974

Percentage Composition: C 69.65%; H 5.58%; N 3.69%; O 21.08%

Biological Source: Alkaloid from *Bocconia integrifolia* (Papaveraceae)

Physical Description: V. pale yellow powder

Optical Rotation: [α]_D²⁰ -15 (c, 0.2 in CHCl₃)

Other Data: Numbering systems vary

References:

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Desai, P.D. *et al.*, *Indian J. Chem.*, 1967, **5**, 41, (*struct*)
Onda, M. *et al.*, *Chem. Pharm. Bull.*, 1970, **18**, 1435, (*pmr*)
Weber, N., *Chem. Ber.*, 1973, **106**, 3769, (*isol*)
Dadson, B.A. *et al.*, *J.C.S. Perkin 1*, 1976, 146, (*isol*)
Slavik, J. *et al.*, *Coll. Czech. Chem. Comm.*, 1977, **42**, 2686, (*isol, uv, synth*)
Chou, F.Y. *et al.*, *Heterocycles*, 1977, **7**, 969, (*isol*)
Gray, A.I. *et al.*, *Phytochemistry*, 1977, **16**, 1017, (*isol*)
Swinehart, J.A. *et al.*, *Phytochemistry*, 1980, **19**, 1219, (*isol*)
Khusainova, Kh.Sh. *et al.*, *Khim. Prir. Soedin.*, 1981, **17**, 670; *CA*, **96**, 65673y, (*isol*)
Oechslin, S.M. *et al.*, *J. Nat. Prod.*, 1991, **54**, 519, (*12-Methoxydihydrochelerythrine*)
Harayama, T. *et al.*, *Synthesis*, 2001, 444-450, (*12-Methoxydihydrochelerythrine*)