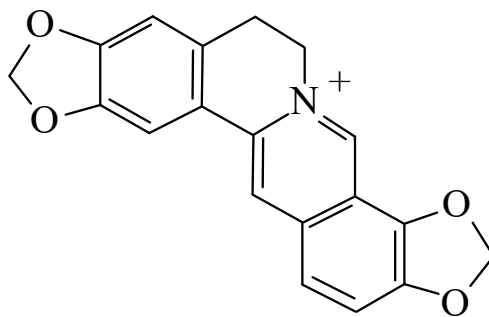




>>Entry Name: Coptisine

Synonym(s): 6,7-Dihydrobis[1,3]benzodioxolo[5,6-*a*:4',5'-*g*]quinolizinium, 9Cl. 2,3:9,10-Bismethylenedioxyprotoberberine



CAS Registry Number: 3486-66-6

Molecular Formula: C<sub>19</sub>H<sub>14</sub>NO<sub>4</sub><sup>(+)</sup>

Molecular Weight: 320.324

Accurate Mass: 320.092284

Percentage Composition: C 71.24%; H 4.41%; N 4.37%; O 19.98%

Biological Source: Quaternary alkaloid from *Coptis japonica* (Ranunculaceae) and many other spp., mostly in the Papaveraceae and Fumariaceae

Use/Importance: Antiinflammatory agent. Uterine contractant

UV: [neutral] λ<sub>max</sub> 226 (ε 24550); 239 (ε 22400); 264 (ε 19500); 356 (ε 19950) (MeOH) (Berdy)

>>Derivative: Hydroxide

CAS Registry Number: 521-25-5

Molecular Formula: C<sub>19</sub>H<sub>15</sub>NO<sub>5</sub>

Molecular Weight: 337.331

Accurate Mass: 337.095024

Percentage Composition: C 67.65%; H 4.48%; N 4.15%; O 23.71%

Melting Point: Mp 216-218°

>>Derivative: Chloride

CAS Registry Number: 6020-18-4

Molecular Formula: C<sub>19</sub>H<sub>14</sub>ClNO<sub>4</sub>

Molecular Weight: 355.777

Accurate Mass: 355.061136

Percentage Composition: C 64.14%; H 3.97%; Cl 9.96%; N 3.94%; O 17.99%

Use/Importance: Antineoplastic agent

Physical Description: Orange needles

Melting Point: Mp 300 dec.°

>>Derivative: Iodide

CAS Registry Number: 6020-84-4

Molecular Formula: C<sub>19</sub>H<sub>14</sub>INO<sub>4</sub>

Molecular Weight: 447.228

Accurate Mass: 446.996757

Percentage Composition: C 51.03%; H 3.16%; I 28.38%; N 3.13%; O 14.31%

Melting Point: Mp 280°

References:

Späth, E. *et al.*, *Ber.*, 1929, **62**, 1029, (*synth*)

Huang-Minlon, *Ber.*, 1936, **69**, 1737, (*isol*)

Jewers, K. *et al.*, *J.C.S. Perkin 2*, 1972, 1393, (*cmr*)

Pavelka, S. *et al.*, *Coll. Czech. Chem. Comm.*, 1976, **41**, 3157, (*uv*)

Slavik, J. *et al.*, *Coll. Czech. Chem. Comm.*, 1991, **56**, 1116, (*chloride*)

Ghee, T.T. *et al.*, *J. Nat. Prod.*, 1991, **54**, 143, (*chloride*)