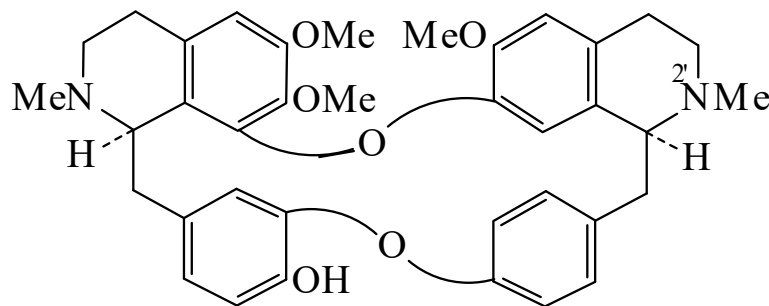




>>Entry Name: **Berbamine**

Synonym(s): 6,6',7-Trimethoxy-2,2'-dimethylberbaman-12-ol, 9Cl. Berbenine



CAS Registry Number: 478-61-5

Molecular Formula: C₃₇H₄₀N₂O₆

Molecular Weight: 608.733

Accurate Mass: 608.288638

Percentage Composition: C 73.01%; H 6.62%; N 4.60%; O 15.77%

General Statement: Diastereoisomeric with Pycnamine [CCG79-P](#)

Biological Source: Alkaloid from *Atherosperma moschatum*, many *Berberis* spp., *Cyclea*, *Limaciopsis*, *Mahonia* and other genera (Atherospermataceae, Berberidaceae, Menispermaceae, Ranunculaceae)

Use/Importance: Antihypertensive, leucocytotic agent. Strong curarising agent

Physical Description: Cryst. (C₆H₆)

Melting Point: Mp 155-157°

Optical Rotation: [α]_D +109 (c, 0.24 in CHCl₃)

Calculated Log P Data: Log P 7.83 (uncertain value) (calc)

Other Data: Isom. to Pycnamine [CCG79-P](#) when treated with MeOH (40°/24h then 2 days at r.t.)

Hazard & Toxicity: Highly toxic ; BERDY HAZD : LD₅₀ (mus, ipr) 75 mg/kg

Sigma: B7641

>>Derivative: Hydrochloride (1:2)

Physical Description: Needles + 7H₂O

Melting Point: Mp 257-258 dec.° (2% HCl)

Optical Rotation: [α]_D²⁰ +64.2 (c, 1.0 in H₂O)

>>Derivative: Methiodide (1:2)

Physical Description: Needles + 1H₂O (Me₂CO aq.)

Melting Point: Mp 287-289 dec.°

>>Derivative: N^{2'}-Oxide (β-)

Synonym(s): Berbamine 2'-β-N-oxide

CAS Registry Number: 103839-20-9

Molecular Formula: C₃₇H₄₀N₂O₇

Molecular Weight: 624.732

Accurate Mass: 624.283553

Percentage Composition: C 71.14%; H 6.45%; N 4.48%; O 17.93%

Biological Source: Alkaloid from aerial parts of *Berberis brandisiana* (Berberidaceae)

>>Derivative: 2'-N-Me

Synonym(s): 2'-N-Methylberbamine

CAS Registry Number: 68231-29-8

Molecular Formula: C₃₈H₄₃N₂O₆⁽⁺⁾

Molecular Weight: 623.767

Accurate Mass: 623.312113

Percentage Composition: C 73.17%; H 6.95%; N 4.49%; O 15.39%

Biological Source: Quaternary alkaloid from *Berberis oblonga* (Berberidaceae)

Physical Description: Amorph. solid (as iodide)

Other Data: CAS No. refers to iodide

>>Derivative: Me ether