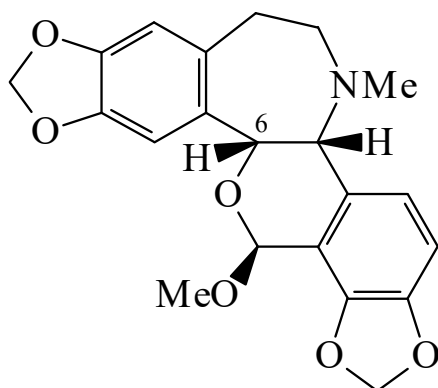




>>Entry Name: Rheadine

Synonym(s): 8-Methoxy-16-methyl-2,3:10,11-bis[methylenebis(oxy)]rheadan, 9Cl. Rheadine. *O*-Methylrheadine. *N*-Methylpapaverrubine E



Molecular Formula: C₂₁H₂₁NO₆

Molecular Weight: 383.4

Accurate Mass: 383.136889

Percentage Composition: C 65.79%; H 5.52%; N 3.65%; O 25.04%

>>Variant: (+)-form

CAS Registry Number: 2718-25-4

Molecular Formula: C₂₁H₂₁NO₆

Molecular Weight: 383.4

Accurate Mass: 383.136889

Percentage Composition: C 65.79%; H 5.52%; N 3.65%; O 25.04%

Biological Source: Alkaloid from *Bocconia frutescens*, *Meconopsis betonicifolia* and other *Meconopsis* spp., *Papaver albiflorum* and other *Papaver* spp. (Papaveraceae)

Use/Importance: Increases intraocular pressure in expt. animals, causes mydriasis. *P. rhoeas* extracts have been used in medicine as sedatives and expectorants but this does not appear to be caused by Rheadine

Physical Description: Needles (MeOH or CHCl₃/MeOH)

Melting Point: Mp 253-254°

Optical Rotation: [α]_D²²+228.5 (c, 1.008 in CHCl₃)

Hazard & Toxicity: Toxic, LD₅₀ 530 mg/kg (i.p., rat)

>>Derivative: *N*-De-Me

Synonym(s): Papaverrubine E. *N*-Demethylrheadine

CAS Registry Number: 6807-95-0

Molecular Formula: C₂₀H₁₉NO₆

Molecular Weight: 369.373

Accurate Mass: 369.121239

Percentage Composition: C 65.03%; H 5.18%; N 3.79%; O 25.99%

Biological Source: Alkaloid from *Bocconia frutescens*, *Meconopsis* spp. and many *Papaver* spp. (Papaveraceae)

Melting Point: Mp 230-231°

Optical Rotation: [α]_D +331 (CHCl₃)

>>Derivative: 6-Epimer

Synonym(s): Isorheadine. *N*-Methylpapaverrubine A. Alkaloid RA

CAS Registry Number: 4046-21-3

Molecular Formula: C₂₁H₂₁NO₆

Molecular Weight: 383.4

Accurate Mass: 383.136889

Percentage Composition: C 65.79%; H 5.52%; N 3.65%; O 25.04%

Biological Source: Alkaloid from *Meconopsis betonicifolia*, *Papaver arenarium*, *Papaver argemone*, *Papaver commutatum* and other *Papaver* spp. (Papaveraceae)

Melting Point: Mp 159-161°

Optical Rotation: [α]_D +314 (c, 0.576 in CHCl₃)