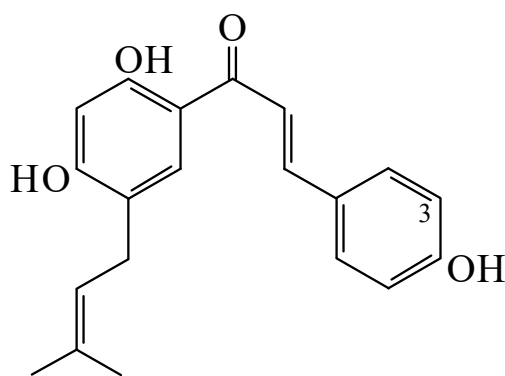




>>Entry Name: 2',4,4'-Trihydroxy-5'-prenylchalcone

Synonym(s): 1-[2,4-Dihydroxy-5-(3-methyl-2-butenyl)phenyl]-3-(4-hydroxyphenyl)-2-propen-1-one. **Brousochalcone B**



CAS Registry Number: 28448-85-3

Molecular Formula: C₂₀H₂₀O₄

Molecular Weight: 324.376

Accurate Mass: 324.13616

Percentage Composition: C 74.06%; H 6.21%; O 19.73%

Biological Source: Constit. of *Broussonetia papyrifera*

Physical Description: Yellow needles (CHCl₃)

Melting Point: Mp 168-170°

>>Derivative: 4'-Me ether

Synonym(s): 2',4-Dihydroxy-4'-methoxy-5'-prenylchalcone. **Bavachalcone**

Molecular Formula: C₂₁H₂₂O₄

Molecular Weight: 338.402

Accurate Mass: 338.15181

Percentage Composition: C 74.54%; H 6.55%; O 18.91%

Biological Source: Constit. of *Psoralea corylifolia*

Physical Description: Deep-orange cryst.

Melting Point: Mp 161-161.5°

Other Data: Incorr. stated by Jain *et al* to lack the Me group, ie giving struct. identical with Brousochalcone B. CA follows this

>>Derivative: 3-Hydroxy

Synonym(s): 2',3,4,4'-Tetrahydroxy-5'-prenylchalcone. **Brousochalcone A**

CAS Registry Number: 99217-68-2

Molecular Formula: C₂₀H₂₀O₅

Molecular Weight: 340.375

Accurate Mass: 340.131075

Percentage Composition: C 70.58%; H 5.92%; O 23.50%

Biological Source: Constit. of *Broussonetia papyrifera*

Physical Description: Yellow amorph. powder

>>Derivative: Tri-Me ether

Synonym(s): 2,4,4'-Trimethoxy-4'-prenylchalcone

Molecular Formula: C₂₃H₂₆O₄

Molecular Weight: 366.456

Accurate Mass: 366.18311

Percentage Composition: C 75.39%; H 7.15%; O 17.46%

Physical Description: Lemon-yellow cryst.

Melting Point: Mp 85-86°

References:

Bhalla, V.K. *et al.*, *Tet. Lett.*, 1968, 2401, (*isol, struct, Bavachalcone*)

Jain, A.C. *et al.*, *Tetrahedron*, 1970, **16**, 2631, (*synth, Bavachalcone*)

Matsumoto, J. *et al.*, *Chem. Pharm. Bull.*, 1985, **33**, 3250

Noungoue-Tchamo, D. *et al.*, *Nat. Prod. Lett.*, 1995, **7**, 73, (*synth*)