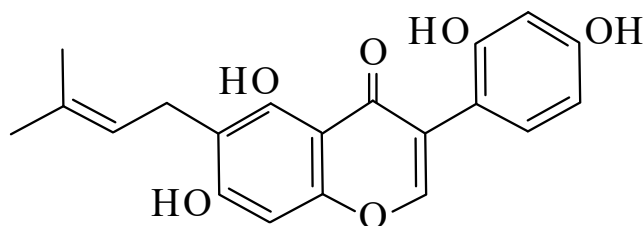




>>Entry Name: 2',4',5,7-Tetrahydroxy-6-prenylisoflavone

Synonym(s): 3-(2,4-Dihydroxyphenyl)-5,7-dihydroxy-6-(3-methyl-2-butenyl)-4*H*-1-benzopyran-4-one, 9Cl. **Luteone**‡



CAS Registry Number: 41743-56-0

Related CAS Registry Numbers(s): 91681-62-8

Molecular Formula: C₂₀H₁₈O₆

Molecular Weight: 354.359

Accurate Mass: 354.11034

Percentage Composition: C 67.79%; H 5.12%; O 27.09%

anagyroides

Physical Description: Pale-yellow plates (MeOH)

Melting Point: Mp 225-227°

Solubility: BERDY SOL: Sol. MeOH, EtOAc; poorly sol. H₂O

UV: [neutral] λ_{max} 266 (ε 28300); 290 (ε 14100) (MeOH) (Berdy) [base] λ_{max} 223 (); 279 (); 337 () (MeOH-NAOH) (Berdy)

>>Derivative: 7-*O*-β-D-Glucopyranoside

CAS Registry Number: 137351-15-6

Molecular Formula: C₂₆H₂₈O₁₁

Molecular Weight: 516.501

Accurate Mass: 516.163165

Percentage Composition: C 60.46%; H 5.46%; O 34.07%

Biological Source: Isol. from the roots of *Lupinus albus*

>>Derivative: 4'-Me ether

Synonym(s): 2',5,7-Trihydroxy-4'-methoxy-6-prenylisoflavone. **Gancaonin N**

CAS Registry Number: 129145-52-4

Molecular Formula: C₂₁H₂₀O₆

Molecular Weight: 368.385

Accurate Mass: 368.12599

Percentage Composition: C 68.47%; H 5.47%; O 26.06%

Biological Source: Isol. from *Glycyrrhiza uralensis*

Physical Description: Prisms (Me₂CO/C₆H₆/hexane)

Melting Point: Mp 159-162°

>>Derivative: 2',4',7-Tri-Me ether

Molecular Formula: C₂₃H₂₄O₆

Molecular Weight: 396.439

Percentage Composition: C 69.68%; H 6.10%; O 24.21%

Melting Point: Mp 134-135°

References:

- Harborne, J.B. *et al.*, *Phytochemistry*, 1976, **15**, 1485, (*occur*)
Jain, A.C. *et al.*, *Indian J. Chem., Sect. B*, 1978, **16**, 611; 613, (*struct, synth*)
Ingham, J.L., *Z. Naturforsch., C*, 1980, **35**, 197; 1983, **38**, 194, (*isol*)
Hashidoko, Y. *et al.*, *Agric. Biol. Chem.*, 1986, **50**, 1797, (*isol, pmr*)
Fukai, T. *et al.*, *Heterocycles*, 1990, **31**, 373, (*Gancaonin N*)
Shibuya, Y. *et al.*, *Z. Naturforsch., C*, 1991, **46**, 513, (*7-glucoside*)