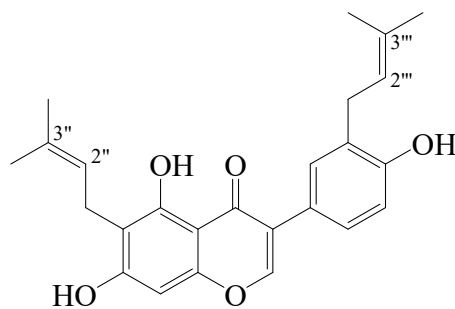




>>Entry Name: 4',5,7-Trihydroxy-3',6-diprenylisoflavone

Synonym(s): 5,7-Dihydroxy-3-[4-hydroxy-3-(3-methyl-2-butenyl)phenyl]-6-(3-methyl-2-butenyl)-4*H*-1-benzopyran-4-one, 9Cl. **Lupalbigenin**. 3'-(γ,γ -Dimethylallyl)wighteone



CAS Registry Number: 76754-24-0

Molecular Formula: C₂₅H₂₆O₅

Molecular Weight: 406.477

Accurate Mass: 406.178025

Percentage Composition: C 73.87%; H 6.45%; O 19.68%

Biological Source: Isol. from aerial parts of *Millettia pachycarpa*, roots of *Lupinus albus* and from *Derris scandens*

Physical Description: Cryst. (C₆H₆/petrol)

Melting Point: Mp 140° (125°)

UV: [neutral] $\lambda_{\max}$ 214 (log ϵ 4.59); 267 (log ϵ 4.53) (MeOH) [neutral] $\lambda_{\max}$ 268 () (MeOH) (Berdy) [base] $\lambda_{\max}$ 279 (); 335 () (MeOH-NAOH) (Berdy) [neutral] $\lambda_{\max}$ 214 (ϵ 38900); 267 (ϵ 33880) (MeOH) (Berdy)

>>Derivative: $\Delta^{3''}$ -Isomer, 2''-hydroxy

Synonym(s): Lupinisol A

CAS Registry Number: 121747-99-7

Molecular Formula: C₂₅H₂₆O₆

Molecular Weight: 422.477

Accurate Mass: 422.17294

Percentage Composition: C 71.07%; H 6.20%; O 22.72%

Biological Source: Constit. of *Lupinus albus* and *Derris scandens*

Physical Description: Yellow powder or gum

>>Derivative: $\Delta^{3'''}$ -Isomer, 2'''-hydroxy

Synonym(s): Derrisiflavone B

Molecular Formula: C₂₅H₂₆O₆

Molecular Weight: 422.477

Accurate Mass: 422.17294

Percentage Composition: C 71.07%; H 6.20%; O 22.72%

Biological Source: Constit. of *Derris scandens*

Physical Description: Pale brown powder

Optical Rotation: $[\alpha]_D +3$ (c, 0.05 in EtOH)

UV: [neutral] $\lambda_{\max}$ 210 (log ϵ 4.54); 264 (log ϵ 4.51) (MeOH)

References:

- Singhal, A.K. *et al.*, *Phytochemistry*, 1980, **19**, 929, (*isol, ir, uv, ms, struct*)
Ingham, J.L. *et al.*, *Z. Naturforsch.*, C, 1983, **38**, 194; 1985, **40**, 482, (*isol*)
Tahara, S. *et al.*, *Phytochemistry*, 1989, **28**, 901, (*Lupinisol A*)
Rao, M.N. *et al.*, *Phytochemistry*, 1994, **37**, 267, (*isol*)
Pistelli, L. *et al.*, *Phytochemistry*, 1996, **42**, 1455, (*isol, uv, ir, pmr, cmr, ms*)
Sekine, T. *et al.*, *Phytochemistry*, 1999, **52**, 87-94, (*Derrisiflavone B*)