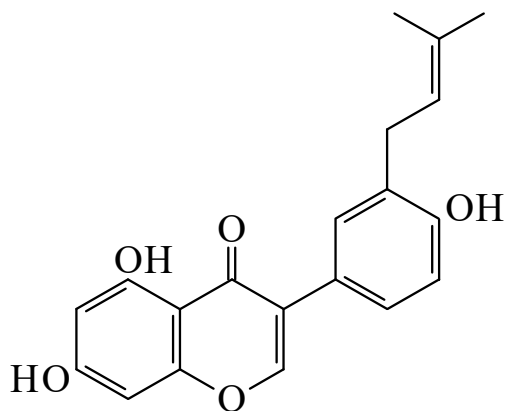




>>Entry Name: 4',5,7-Trihydroxy-3'-prenylisoflavone

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



CAS Registry Number: 68436-47-5

Molecular Formula: C₂₀H₁₈O₅

Molecular Weight: 338.359

Accurate Mass: 338.115425

Percentage Composition: C 71.00%; H 5.36%; O 23.64%

Biological Source: Isol. from *Cajanus cajan* and *Sophora tomentosa*

Use/Importance: Phytoalexin

Physical Description: Needles (1,2-dichloroethane)

Melting Point: Mp 171-172°

>>Derivative: 4'-Me ether

Synonym(s): 5,7-Dihydroxy-4'-methoxy-3'-prenylisoflavone. **4'-O-Methylisowighteone**. 3'-Prenylbiochanin A

Molecular Formula: C₂₁H₂₀O₅

Molecular Weight: 352.386

Accurate Mass: 352.131075

Percentage Composition: C 71.58%; H 5.72%; O 22.70%

Biological Source: Constit. of *Erythrina saculeuxii*

Physical Description: Cryst. (CHCl₃)

Melting Point: Mp 196-197°

UV: [neutral] $\lambda_{\max}$ 208 (); 261 (); 288 (sh) (); 323 () (MeOH)

References:

- Nakayama, M. *et al.*, *Bull. Chem. Soc. Jpn.*, 1978, **51**, 2398, (*synth*)
Dahiya, J.S. *et al.*, *Phytochemistry*, 1984, **23**, 871, (*isol*)
Tanaka, T. *et al.*, *Phytochemistry*, 1997, **46**, 1431-1437, (*isol*, *uv*, *pmr*, *ms*)
Yenesew, A. *et al.*, *Phytochemistry*, 1998, **49**, 247-249, (*4'-Methylisowighteone*)