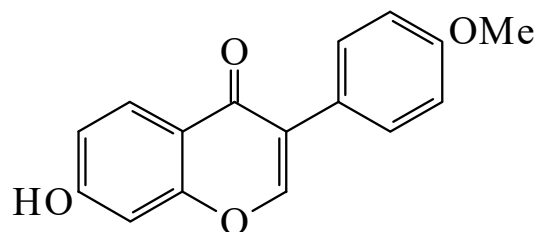




>>Entry Name: 7-Hydroxy-4'-methoxyisoflavone

Synonym(s): 7-Hydroxy-3-(4-methoxyphenyl)-4H-1-benzopyran-4-one, 9Cl. **Formononetin**. Formoononetin. Biochanin B. Neochanin. Pratol



CAS Registry Number: 485-72-3

Molecular Formula: C₁₆H₁₂O₄

Molecular Weight: 268.268

Accurate Mass: 268.07356

Percentage Composition: C 71.64%; H 4.51%; O 23.86%

Biological Source: Constit. of red and subterranean clovers (*Trifolium pratense* and *Trifolium subterraneum*) and of Chana (*Cicer arietinum*). Constit. of the heartwood of *Pterocarpus indicus*. Found also in *Baptisia australis*. Widely distributed in the Leguminosae (Papilionoideae). Also in *Viola caducifolia* and *Viola multinervia* (Myricaceae)

Biological Use/Importance: Shows estrogenic props.

Physical Description: Colourless or pale yellow needles (EtOH)

Melting Point: Mp 265-266° (257-258°)

Solubility: BERDY SOL: Sol. MeOH, Et₂O; poorly sol. H₂O, hexane

UV: [neutral] λ_{max} 250 (ε 27400); 300 (ε 12240) (MeOH) (Berdy) [neutral] λ_{max} 249 (ε 25120); 298 (ε 11200) (EtOH) (Berdy) [base] λ_{max} 258 (); 340 () (MeOH-NAOH) (Berdy)

>>Derivative: 7-O-β-D-Glucopyranoside

Synonym(s): **Ononin**. Ononoside

CAS Registry Number: 486-62-4

Molecular Formula: C₂₂H₂₂O₉

Molecular Weight: 430.41

Accurate Mass: 430.126385

Percentage Composition: C 61.39%; H 5.15%; O 33.46%

Biological Source: Widely distributed in the Leguminosae subfamily Papilionoideae, eg. in *Amorpha fruticosa*, *Baptisia* spp., *Cicer arietinum*, *Cladrastis* spp., *Dalbergia paniculata*, *Genista patula*, *Medicago sativa*, *Ononis* spp., *Piptanthus* spp. *Pueraria thunbergiana*, *Spartium junceum*, *Thermopsis* spp., *Trifolium* spp. and *Wisteria floribunda*

Physical Description: Needles (dioxan aq.)

Melting Point: Mp 218-219°

Solubility: BERDY SOL: Sol. MeOH, Et₂O; poorly sol. H₂O

UV: [neutral] λ_{max} 250 () (MeOH) (Berdy)

>>Derivative: 7-O-(6-O-Acetyl-β-D-glucopyranoside)

Synonym(s): **6''-O-Acetylononin**

CAS Registry Number: 120727-10-8

Molecular Formula: C₂₄H₂₄O₁₀

Molecular Weight: 472.448

Accurate Mass: 472.13695

Percentage Composition: C 61.02%; H 5.12%; O 33.86%

Biological Source: Isol. from *Ononis speciosa*

Physical Description: Cryst. (CHCl₃/MeOH)

Melting Point: Mp 175-180°

>>Derivative: 7-O-(6-O-Malonyl-β-D-glucopyranoside)

CAS Registry Number: 34232-16-1

Molecular Formula: C₂₅H₂₄O₁₂

Molecular Weight: 516.457

Accurate Mass: 516.12678

Percentage Composition: C 58.14%; H 4.68%; O 37.17%

Biological Source: Isol. from leaves of *Trifolium pratense* and *Trifolium subterraneum*

Physical Description: Needles + ½H₂O (MeOH)