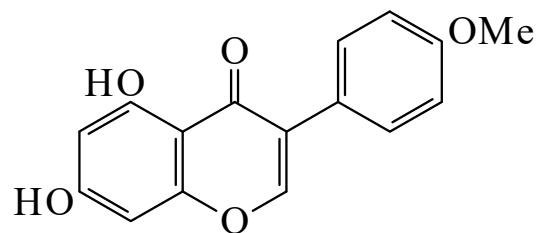




>>Entry Name: 5,7-Dihydroxy-4'-methoxyisoflavone

ENTRY UNDER REVIEW

Synonym(s): 5,7-Dihydroxy-3-(4-methoxyphenyl)-4*H*-1-benzopyran-4-one, 9Cl. **Biochanin A**. Genistein 4'-methyl ether. Pratensol. Olmelin



CAS Registry Number: 491-80-5

Molecular Formula: C₁₆H₁₂O₅

Molecular Weight: 284.268

Accurate Mass: 284.068475

Percentage Composition: C 67.60%; H 4.25%; O 28.14%

Biological Source: Constit. of clover (*Trifolium repens*), *Dalbergia* and *Cotoneaster* spp. Widely distributed in the Leguminosae (Papilionoideae), also in *Cotoneaster pannosa* and *Cotoneaster serotina* (Rosaceae), *Viola caducifolia* (Myricaceae) and others

Use/Importance: Possesses sl. estrogenic activity

Physical Description: Needles (MeOH or EtOH aq.)

Melting Point: Mp 215-216°

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

UV: [neutral] λ_{max} 263 (ε 30000) (MeOH) (Berdy) [neutral] λ_{max} 262 (ε 40700); 279 () (EtOH) (Berdy) [base] λ_{max} 274 (ε 30000); 336 (ε 9000) (EtOH-NaOH) (Berdy)

Aldrich: 14563-7

Fluka: 14385

Sigma: D2016

>>Derivative: 7-Ac

Physical Description: Rectangular plates (MeOH)

Melting Point: Mp 155-156°

>>Derivative: Di-Ac

Physical Description: Needles (MeOH)

Melting Point: Mp 190°

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

Synonym(s): Sissotrin. Astroside

CAS Registry Number: 5928-26-7

Molecular Formula: C₂₂H₂₂O₁₀

Molecular Weight: 446.41

Accurate Mass: 446.1213

Percentage Composition: C 59.19%; H 4.97%; O 35.84%

Biological Source: Constit. of *Thermopsis* and *Cotoneaster* spp., also from *Astragalus austriacus*, *Baptisia leucantha*, *Cicer arietinum*, *Pueraria thunbergiana*, *Sophora japonica* and *Trifolium* spp.

Melting Point: Mp 220° (212-214°). Mp 223-224.5°

Optical Rotation: [α]_D³⁰ -35.3 (c, 1.644 in DMF). [α]_D²⁰ -117.8 (c, 0.98 in DMF)

>>Derivative: 7-*O*-[D-Apio-β-D-furanosyl-(1→6)-β-D-glucopyranoside]

Synonym(s): Lanceolarin

CAS Registry Number: 15914-68-8

Molecular Formula: C₂₇H₃₀O₁₄

Molecular Weight: 578.526

Accurate Mass: 578.16356

Percentage Composition: C 56.06%; H 5.23%; O 38.72%

Biological Source: Constit. of the root bark of *Dalbergia lanceolaria*

Physical Description: Cryst. (MeOH)

Melting Point: Mp 165-167° (unsharp, previous sintering)

Optical Rotation: [α]_D²² -96.9 (c, 1.032 in 80% MeOH aq.)