



Biological Source: Isol. from *Genista* spp., *Lupinus* spp. and a number of other spp. in the Leguminosae subfamily Papilionoideae. Also in *Prunus aequinoctalis*, *Prunus avium* and *Prunus nipponica* (Rosaceae)

Physical Description: Leaflets (EtOH)

Melting Point: Mp 254-256° (dec.)

Optical Rotation: $[\alpha]_{\text{D}}^{21} -27.7$ (MeOH aq.)

UV: [neutral] λ_{max} 262 () (MeOH) (Berdy)

Sigma: G0897

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

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

CAS Registry Number: 73566-30-0

Molecular Formula: C₂₃H₂₂O₁₁

Molecular Weight: 474.42

Accurate Mass: 474.116215

Percentage Composition: C 58.23%; H 4.67%; O 37.10%

Physical Description: Needles

Melting Point: Mp 185-186°

>>**Derivative:** 7-*O*-(6-*O*-Malonyl-D-glucoside)

Synonym(s): Genistein 7-*O*-glucoside 6''-malonate

Molecular Formula: C₂₄H₂₂O₁₃

Molecular Weight: 518.43

Accurate Mass: 518.106045

Percentage Composition: C 55.60%; H 4.28%; O 40.12%

Biological Source: Isol. from leaves of *Trifolium subterraneum*. Poss. accompanied by its Me ester

Physical Description: Glass

Melting Point: Mp *ca.* 160°

>>**Derivative:** 7-*O*-[4-Hydroxycinnamoyl-($\rightarrow$ 2)- β -D-glucopyranoside]

Synonym(s): Genistein 7-*O*-(2-*p*-coumaroyl)glucoside

CAS Registry Number: 106915-84-8

Molecular Formula: C₃₀H₂₆O₁₂

Molecular Weight: 578.528

Accurate Mass: 578.14243

Percentage Composition: C 62.28%; H 4.53%; O 33.19%

Biological Source: Isol. from *Trifolium repens*

Melting Point: Mp 250-252°

>>**Derivative:** 4'-*O*- α -L-Rhamnopyranoside

Synonym(s): Genistein 4'-rhamnoside

Molecular Formula: C₂₁H₂₀O₉

Molecular Weight: 416.384

Accurate Mass: 416.110735

Percentage Composition: C 60.58%; H 4.84%; O 34.58%

Biological Source: Constit. of *Pithecellobium dulce*

Physical Description: Pale yellow cryst.

Melting Point: Mp 301-302°

UV: [neutral] λ_{max} 264 (); 328 () (MeOH)

>>**Derivative:** 7-*O*-[Xylosyl-(1 $\rightarrow$?)]-glucoside]

Molecular Formula: C₂₆H₂₈O₁₂

Molecular Weight: 532.5

Accurate Mass: 532.15808

Percentage Composition: C 58.65%; H 5.30%; O 36.05%

Biological Source: Isol. from *Ammothamnus lehmannii*