



Optical Rotation: $[\alpha]_D^{19} -94.9$ (c, 1.1 in MeOH)

>>**Derivative:** 4'-O-[β -D-Apiofuranosyl-(1 $\rightarrow$ 2)- β -D-glucopyranoside]

Synonym(s): Liquiritin apioside

CAS Registry Number: 74639-14-8

Molecular Formula: C₂₆H₃₀O₁₃

Molecular Weight: 550.515

Accurate Mass: 550.168645

Percentage Composition: C 56.73%; H 5.49%; O 37.78%

Biological Source: Found in *Glycyrrhiza uralensis* and *Glycyrrhiza glabra*

Physical Description: Powder

Optical Rotation: $[\alpha]_D^{19} -79.6$ (c, 1.37 in MeOH)

>>**Derivative:** 4'-O-[β -D-Apiofuranosyl-(1 $\rightarrow$ 2)- β -D-glucopyranoside], 7-O- β -D-glucopyranoside

Synonym(s): Glucoliquiritin apioside

CAS Registry Number: 157226-47-6

Molecular Formula: C₃₂H₄₀O₁₈

Molecular Weight: 712.657

Accurate Mass: 712.22147

Percentage Composition: C 53.93%; H 5.66%; O 40.41%

Biological Source: Constit. of *Glycyrrhiza glabra*

Physical Description: Pale yellow prisms (CHCl₃/MeOH aq.)

Melting Point: Mp 157-158°

Optical Rotation: $[\alpha]_D^{20} -80$ (c, 0.35 in MeOH)

>>**Derivative:** 7-O-[β -D-Apiofuranosyl-(1 $\rightarrow$ 2)- β -D-glucopyranoside]

CAS Registry Number: 135432-48-3

Molecular Formula: C₂₆H₃₀O₁₃

Molecular Weight: 550.515

Accurate Mass: 550.168645

Percentage Composition: C 56.73%; H 5.49%; O 37.78%

Biological Source: Constit. of *Glycyrrhiza glabra*

>>**Derivative:** 4'-O-[3-O-Acetyl- β -D-apiofuranosyl-(1 $\rightarrow$ 2)- β -D-glucopyranoside]

CAS Registry Number: 226946-10-7

Molecular Formula: C₂₈H₃₂O₁₄

Molecular Weight: 592.552

Accurate Mass: 592.17921

Percentage Composition: C 56.76%; H 5.44%; O 37.80%

Biological Source: Constit. of the roots of *Glycyrrhiza uralensis*

>>**Derivative:** 4'-O-[4-Hydroxycinnamoyl-($\rightarrow$ 5)- β -D-apiofuranosyl-(1 $\rightarrow$ 2)- β -D-glucopyranoside]

Synonym(s): Licorice glycoside D2

Molecular Formula: C₃₅H₃₆O₁₅

Molecular Weight: 696.66

Accurate Mass: 696.205425

Percentage Composition: C 60.34%; H 5.21%; O 34.45%

Biological Source: Constit. of *Glycyrrhiza uralensis*

Physical Description: Amorph. pale yellow powder

Optical Rotation: $[\alpha]_D -23.4$ (c, 1 in MeOH)

UV: [neutral] $\lambda_{\max}$ 218 (log ϵ 4.66); 228 (log ϵ 4.56); 280 (log ϵ 4.46); 314 (log ϵ 4.54) (MeOH)