



Biological Source: Isol. from *Citrus paradisi* and other *Citrus* spp.

Physical Description: Cryst.

Melting Point: Mp 239°

Optical Rotation: $[\alpha]_{\text{D}}^{25} -89.3$ (c, 1.25 in Py)

>>**Derivative:** 7-*O*-[α -L-Rhamnopyranosyl-(1→2)- β -D-glucopyranoside], diglucoside

Synonym(s): Naringin diglucoside

Molecular Formula: C₃₉H₅₂O₂₄

Molecular Weight: 904.825

Accurate Mass: 904.28486

Percentage Composition: C 51.77%; H 5.79%; O 42.44%

Biological Source: Isol. from *Acacia* spp.

>>**Derivative:** 7-*O*-[α -L-Rhamnopyranosyl-(1→2)-6-*O*-malonyl- β -D-glucopyranoside]

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

CAS Registry Number: 139934-59-1

Molecular Formula: C₃₀H₃₄O₁₇

Molecular Weight: 666.588

Accurate Mass: 666.179605

Percentage Composition: C 54.06%; H 5.14%; O 40.80%

Biological Source: Constit. of the grapefruit

>>**Derivative:** 7-*O*-[α -L-Rhamnopyranosyl-(1→6)- β -D-glucopyranoside]

Synonym(s): Narirutin. Naringenin 7-rutinoside

CAS Registry Number: 14259-46-2

Molecular Formula: C₂₇H₃₂O₁₄

Molecular Weight: 580.541

Accurate Mass: 580.17921

Percentage Composition: C 55.86%; H 5.56%; O 38.58%

Biological Source: Obt. from *Camellia sinensis*

Physical Description: Cryst. + H₂O

Melting Point: Mp 160-165°

>>**Derivative:** 7-*O*-[α -L-Rhamnopyranosyl-(1→6)- β -D-glucopyranoside], 4'-*O*- β -D-glucopyranoside

Synonym(s): Narirutin 4'-glucoside. Naringenin 4'-glucoside 7-rutinoside

CAS Registry Number: 17257-22-6

Molecular Formula: C₃₃H₄₂O₁₉

Molecular Weight: 742.683

Accurate Mass: 742.232035

Percentage Composition: C 53.37%; H 5.70%; O 40.93%

Biological Source: Isol. from *Citrus paradisi*

Physical Description: Powder + 1H₂O

Melting Point: Mp 189-200°

Optical Rotation: $[\alpha]_{\text{D}} -62.6$ (c, 0.92 in Py)

>>**Derivative:** 7-*O*-[β -D-Galactopyranosyl-(1→4)- β -D-glucopyranoside]

CAS Registry Number: 81244-23-7

Molecular Formula: C₂₇H₃₂O₁₅

Molecular Weight: 596.541

Accurate Mass: 596.174125

Percentage Composition: C 54.36%; H 5.41%; O 40.23%

Biological Source: Isol. from *Dillenia pentagyna*

Physical Description: Cryst. (EtOAc/petrol)

Melting Point: Mp 142-145°