



CAS Registry Number: 13018-09-2
Molecular Formula: C₁₅H₂₄O₃
Molecular Weight: 252.353
Accurate Mass: 252.172545
Percentage Composition: C 71.39%; H 9.59%; O 19.02%
Physical Description: Cryst. (EtOH aq.)
Melting Point: Mp 179-180°
Optical Rotation: [α]_D −25.7 (c, 1.8 in CHCl₃)

>> **Derivative:** 8-Angeloyl, 11-Ac
Synonym(s): Torilin

CAS Registry Number: 13018-10-5

Molecular Formula: C₂₂H₃₂O₅
Molecular Weight: 376.492
Accurate Mass: 376.224975
Percentage Composition: C 70.19%; H 8.57%; O 21.25%
Biological Source: Constit. of seeds of *Torilis japonica*
Physical Description: Cryst. (petrol)
Melting Point: Mp 77-78°
Optical Rotation: [α]_D¹⁴ −45.3 (c, 0.85 in EtOH)

>> **Derivative:** 11-O-β-D-Glucopyranoside

CAS Registry Number: 219830-55-4

Molecular Formula: C₂₁H₃₄O₈
Molecular Weight: 414.495
Accurate Mass: 414.22537
Percentage Composition: C 60.85%; H 8.27%; O 30.88%
Biological Source: Constit. of *Torilis japonica*
Physical Description: Amorph. powder
Optical Rotation: [α]_D²¹ −36.4 (c, 0.9 in MeOH)

>> **Derivative:** 8-Ketone
Synonym(s): 11-Hydroxy-4-guaiene-3,8-dione

Molecular Formula: C₁₅H₂₂O₃
Molecular Weight: 250.337
Accurate Mass: 250.156895
Percentage Composition: C 71.97%; H 8.86%; O 19.17%
Physical Description: Amorph. powder
Optical Rotation: [α]_D²¹ +20.8 (c, 0.3 in MeOH)

>> **Derivative:** 8-Ketone, 11-O-β-D-glucopyranoside

CAS Registry Number: 219830-58-7

Molecular Formula: C₂₁H₃₂O₈
Molecular Weight: 412.479
Accurate Mass: 412.20972
Percentage Composition: C 61.15%; H 7.82%; O 31.03%
Biological Source: Constit. of *Torilis japonica*
Physical Description: Amorph. powder
Optical Rotation: [α]_D²¹ +5.1 (c, 0.7 in MeOH)

References:

Chikamatsu, H. *et al.*, *Tetrahedron*, 1969, **25**, 4751-4765, (*isol*)
Kitajima, J. *et al.*, *Chem. Pharm. Bull.*, 1998, **46**, 1743-1747, (*isol*, *pmr*, *cmr*)