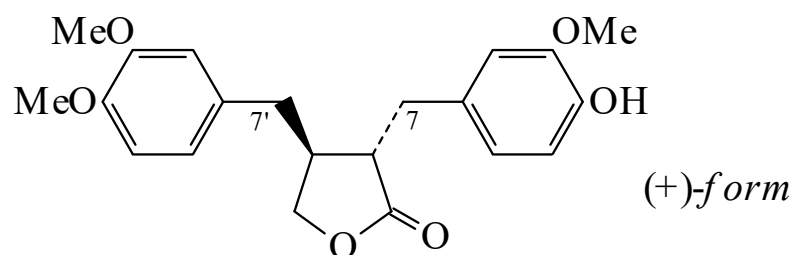




>>Entry Name: Arctigenin

Synonym(s): 4-[(3,4-Dimethoxyphenyl)methyl]dihydro-3-[(4-hydroxy-3-methoxyphenyl)methyl]-2(3*H*)-furanone, 9Cl. 4-Hydroxy-3,3',4'-trimethoxylignan-9,9'-olide. 4'-*O*-Methylmatairesinol



Related CAS Registry Numbers(s): 51447-12-2 81446-30-2 87678-74-8 87678-75-9 144901-91-7

Molecular Formula: C₂₁H₂₄O₆

Molecular Weight: 372.417

Accurate Mass: 372.15729

Percentage Composition: C 67.73%; H 6.50%; O 25.78%

Use/Importance: Shows anti-HIV and antileukaemic activity

Calculated Log P Data: Log P 1.71 (calc)

UV: [neutral] λ_{max} 228 (ε 100000); 279 (ε 31623) (MeOH) (Berdy) [neutral] λ_{max} 230 (); 280 () (EtOH) (Berdy)

>>Variant: (+)-form

CAS Registry Number: 84413-77-4

Molecular Formula: C₂₁H₂₄O₆

Molecular Weight: 372.417

Accurate Mass: 372.15729

Percentage Composition: C 67.73%; H 6.50%; O 25.78%

Biological Source: Constit. of roots of *Wikstroemia viridiflora*

Optical Rotation: [α]_D²³ +28.05 (c, 1.23 in EtOH)

>>Variant: (–)-form

CAS Registry Number: 7770-78-7

Molecular Formula: C₂₁H₂₄O₆

Molecular Weight: 372.417

Accurate Mass: 372.15729

Percentage Composition: C 67.73%; H 6.50%; O 25.78%

Biological Source: Isol. from *Cnicus benedictus*, *Forsythia viridissima*, *Arctium lappa*, *Ipomoea cairica* and others

Physical Description: Plates (MeOH/Et₂O)

Melting Point: Mp 102°

Optical Rotation: [α]_D –37.7 (EtOH) (–28.7)

>>Derivative: Ac

Physical Description: Needles (EtOAc)

Melting Point: Mp 52-60°

>>Derivative: *O*-β-D-Glucopyranoside

Synonym(s): Arctiin. Arctin

CAS Registry Number: 20362-31-6

Molecular Formula: C₂₇H₃₄O₁₁

Molecular Weight: 534.559

Accurate Mass: 534.210115

Percentage Composition: C 60.67%; H 6.41%; O 32.92%

Biological Source: Constit. of the seeds of *Arctium lappa* and of the stems of *Trachelospermum asiaticum*, from *Forsythia* spp. and *Centaurea imperialis*. Widespread in the Compositae

Melting Point: Mp 110-112°

Optical Rotation: [α]_D²⁷ –51.5 (c, 2 in EtOH)

UV: [neutral] λ_{max} 229 (ε 5012); 279 (ε 1995) (MeOH) (Berdy) [neutral] λ_{max} 228 (); 278 () (EtOH) (Berdy)

Other Data: Arctin was originally descr. as a different compd. and given an erroneous struct.