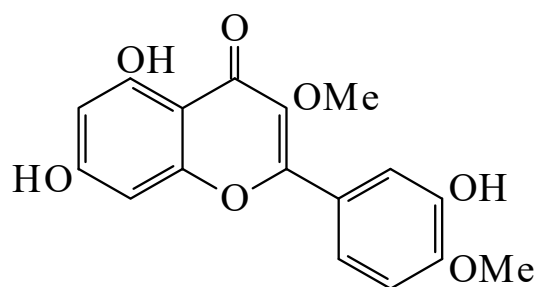




>>Entry Name: 3',5,7-Trihydroxy-3,4'-dimethoxyflavone

Synonym(s): 5,7-Dihydroxy-2-(3-hydroxy-4-methoxyphenyl)-3-methoxy-4*H*-1-benzopyran-4-one



CAS Registry Number: 33429-83-3

Molecular Formula: C₁₇H₁₄O₇

Molecular Weight: 330.293

Accurate Mass: 330.073955

Percentage Composition: C 61.82%; H 4.27%; O 33.91%

Biological Source: Isol. from *Baccharis sarothroides*, *Balsamorhiza macrophylla*, *Brickellia arguta* and other plant spp.

Use/Importance: Antineoplastic agent

Physical Description: Yellow cryst. (MeOH)

Melting Point: Mp 235-236°

Calculated Log P Data: Log P 0.93 (calc)

UV: [neutral] λ_{max} 257 (ε 17500); 269 (ε 15500); 357 (ε 15200) (EtOH) (Berdy)

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

CAS Registry Number: 186145-42-6

Molecular Formula: C₂₉H₃₄O₁₆

Molecular Weight: 638.578

Accurate Mass: 638.18469

Percentage Composition: C 54.55%; H 5.37%; O 40.09%

Biological Source: Constit. of *Bidens leucantha* and *Bidens pilosa* var. *radiata*

Physical Description: Powder

Melting Point: Mp 196-198°

Optical Rotation: [α]_D²⁵+18 (MeOH aq.). [α]_D²⁵-93.6 (c, 0.36 in MeOH)

UV: [neutral] λ_{max} 255 (log ε 4.4); 264 (sh) (log ε 4.32); 354 (log ε 4.31) (MeOH)

Other Data: Large variation in reported opt. rotn. between the two isolates (anomers?)

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

CAS Registry Number: 186145-43-7

Molecular Formula: C₃₅H₄₄O₂₀

Molecular Weight: 784.721

Accurate Mass: 784.2426

Percentage Composition: C 53.57%; H 5.65%; O 40.78%

Biological Source: Constit. of *Bidens leucantha*

Melting Point: Mp 205-207°

Optical Rotation: [α]_D²⁵+8.5 (MeOH aq.)

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

CAS Registry Number: 186145-45-9

Molecular Formula: C₃₅H₄₄O₂₁

Molecular Weight: 800.72

Accurate Mass: 800.237515

Percentage Composition: C 52.50%; H 5.54%; O 41.96%

Biological Source: Constit. of *Bidens leucantha*

Melting Point: Mp 193-195°

Optical Rotation: [α]_D²⁵+10.7 (MeOH aq.)

References: