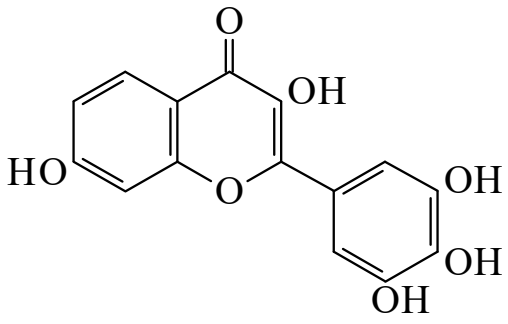
>>**Entry Name: 3,3',4',5',7-Pentahydroxyflavone**
Synonym(s): 3,7-Dihydroxy-2-(3,4,5-trihydroxyphenyl)-4*H*-1-benzopyran-4-one, 9CI. 3',4',5',7-Tetrahydroxyflavonol. **Robinetin.** Norkanugin



CAS Registry Number: 490-31-3

Molecular Formula: $C_{15}H_{10}O_7$
Molecular Weight: 302.24
Accurate Mass: 302.042655
Percentage Composition: C 59.61%; H 3.33%; O 37.06%
Biological Source: Constit. of *Robinia pseudacacia, Gleditsia monosperma* and other plants
Use/Importance: Used as 1m*M* soln. in EtOH for photometric detn. of Zr (λ_{max} 415 nm)
Physical Description: Greenish-yellow needles (AcOH aq.)
Melting Point: Mp 325-330 dec.°
Solubility: BERDY SOL: Sol. EtOH, EtOAc; fairly sol. H_2O, Et_2O; poorly sol. $CHCl_3$, C_6H_6, hexane
UV: [neutral] λ_{max} 254 (); 317 (); 370 () (EtOH) (Berdy) [base] λ_{max} 274 (); 337 (); 420 () (EtOH-NaOH) (Berdy)

>>**Derivative:** 3',5'-Di-Me ether
Synonym(s): 3,4', 7-Trihydroxy-3',5'-dimethoxyflavone. 4',7-Dihydroxy-3',5'-dimethoxyflavonol. **Laurentinol**

Molecular Formula: $C_{17}H_{14}O_7$
Molecular Weight: 330.293
Accurate Mass: 330.073955
Percentage Composition: C 61.82%; H 4.27%; O 33.91%
Biological Source: Constit. of the heartwood of *Millettia laurentii*
Physical Description: Green prisms (MeOH)
Melting Point: Mp 258-260°
UV: [neutral] λ_{max} 250 (log ε 4.05); 320 (log ε 2.93); 360 (log ε 4.23) (EtOH)

>>**Derivative:** 3,3',7-Tri-Me ether
Synonym(s): 3',4'-Dihydroxy-3,5',7-trimethoxyflavone

Molecular Formula: $C_{18}H_{16}O_7$
Molecular Weight: 344.32
Accurate Mass: 344.089605
Percentage Composition: C 62.79%; H 4.68%; O 32.53%
Biological Source: Constit. of the roots of *duroia hirsuta*
Melting Point: Mp 230-238°
Optical Rotation: $[\alpha]_D^{25}$+154 (c, 0.1 in MeOH)
UV: [neutral] λ_{max} 259 (log ε 3.98); 313 (log ε 4.14) (MeOH)
Other Data: Unexplained opt. rotation assigned

>>**Derivative:** 3',5',7-Tri-Me ether
Synonym(s): 3,4'-Dihydroxy-3',5',7-trimethoxyflavone. 4'-Hydroxy-3',5',7-trimethoxyflavonol

Molecular Formula: $C_{18}H_{16}O_7$
Molecular Weight: 344.32
Accurate Mass: 344.089605
Percentage Composition: C 62.79%; H 4.68%; O 32.53%
Biological Source: Constit. of the roots of *Duroia hirsuta*
Melting Point: Mp 232-239°
Optical Rotation: $[\alpha]_D^{25}$+158 (c, 0.1 in MeOH)
UV: [neutral] λ_{max} 258 (log ε 3.76); 314 (log ε 4.21) (MeOH)
Other Data: Unexplained opt. rotation assigned