



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

CAS Registry Number: 18103-42-9

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: Isol. from *Bromus pauciflorus* and *Hordeum vulgare* and in other Gramineae
Physical Description: Cryst. (AcOH)
Melting Point: Mp 272-274°

>>Derivative: 3',4',5'-Tri-Me ether, 7-O-[α -L-rhamnopyranosyl-(1 $\rightarrow$ 6)- β -D-glucopyranoside]

Molecular Formula: $C_{30}H_{36}O_{16}$
Molecular Weight: 652.605
Accurate Mass: 652.20034
Percentage Composition: C 55.21%; H 5.56%; O 39.23%
Biological Source: Constit. of wheat (*Triticum aestivum*)
UV: [neutral] $\lambda_{\max}$ 270 (); 311 (sh) (); 331 () (MeOH)

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

CAS Registry Number: 178664-72-7

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 *Lethedon tannaensis*
Use/Importance: DNA topoisomerase I inhibitor. Cytotoxic agent
Physical Description: Yellow needles (MeOH)
Melting Point: Mp 194-195°
UV: [neutral] $\lambda_{\max}$ 210 (log ϵ 4.6); 240 (log ϵ 4.2); 270 (log ϵ 4.1); 334 (log ϵ 4.2) (EtOH)

>>Derivative: 3',4',7-Tri-Me ether, 5-O- β -D-glucopyranoside
Synonym(s): **Lethedoside C**

Molecular Formula: $C_{24}H_{26}O_{12}$
Molecular Weight: 506.462
Accurate Mass: 506.14243
Percentage Composition: C 56.92%; H 5.17%; O 37.91%
Biological Source: Constit. of *Lethedon tannaensis*
Physical Description: Amorph. solid
Optical Rotation: $[\alpha]_D^{20}$ -61.6 (c, 0.36 in Py)
UV: [neutral] $\lambda_{\max}$ 207 (log ϵ 4.7); 239 (log ϵ 4.4); 263 (log ϵ 4.1); 330 (log ϵ 4.3) (MeOH)

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

CAS Registry Number: 107316-94-9

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 *Betonica officinalis*
Physical Description: Yellow cryst. (EtOH)
Melting Point: Mp 218-220°