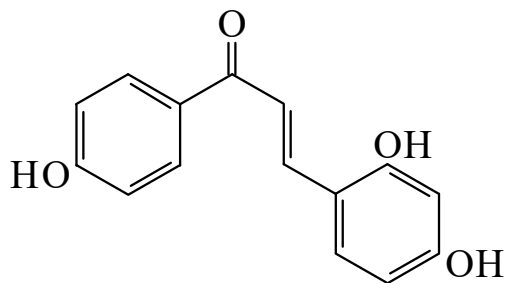




>>Entry Name: **2,4,4'-Trihydroxychalcone**

Synonym(s): 3-(2,4-Dihydroxyphenyl)-1-(4-hydroxyphenyl)-2-propen-1-one



Molecular Formula: C₁₅H₁₂O₄

Molecular Weight: 256.257

Accurate Mass: 256.07356

Percentage Composition: C 70.31%; H 4.72%; O 24.97%

>>Variant: (*E*)-form

Molecular Formula: C₁₅H₁₂O₄

Molecular Weight: 256.257

Accurate Mass: 256.07356

Percentage Composition: C 70.31%; H 4.72%; O 24.97%

Biological Source: Constit. of *Glycyrrhiza glabra* roots

>>Derivative: 2-Me ether

Synonym(s): 4,4'-Dihydroxy-2-methoxychalcone. **Echinatin**‡

CAS Registry Number: 34221-41-5

Molecular Formula: C₁₆H₁₄O₄

Molecular Weight: 270.284

Accurate Mass: 270.08921

Percentage Composition: C 71.10%; H 5.22%; O 23.68%

Biological Source: Isol. from tissue culture of *Glycyrrhiza echinata*

Physical Description: Yellow needles (EtOH aq.)

Melting Point: Mp 209.5-212 dec.°

UV: [neutral] λ_{max} 235 (ε 5500); 312 (ε 7400); 367 (ε 12300) (MeOH) (Berdy) [base] λ_{max} 248 (ε 7980); 433 (ε 23500) (MeOH-NAOH) (Berdy)

Other Data: A 'retrochalcone' of anomalous subn. pattern

>>Derivative: 2,4'-Di-Me ether

Synonym(s): 4-Hydroxy-2,4'-dimethoxychalcone. **Glypallichalcone**

CAS Registry Number: 146763-58-8

Molecular Formula: C₁₇H₁₆O₄

Molecular Weight: 284.311

Accurate Mass: 284.10486

Percentage Composition: C 71.82%; H 5.67%; O 22.51%

Biological Source: Constit. of *Glycyrrhiza pallidiflora*

Physical Description: Yellow cryst

Melting Point: Mp 140-142°

References:

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Ayabe, S.-I. *et al.*, *Phytochemistry*, 1986, **25**, 2803, (*biosynth*)
Cai, L.N. *et al.*, *Yaoxue Xuebao*, 1992, **27**, 748-751, (*Glypallichalcone*)
Nielsen, S.F. *et al.*, *Bioorg. Med. Chem. Lett.*, 1995, **5**, 449, (*Echinatin, synth, activity*)
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