



>>Derivative: 4,4',6'-Tri-Me ether

CAS Registry Number: 70872-24-1

Molecular Formula: C₂₃H₂₆O₅

Molecular Weight: 382.455

Percentage Composition: C 72.23%; H 6.85%; O 20.92%

Physical Description: Cryst. (EtOAc/petrol)

Melting Point: Mp 131-132° (126-127°)

>>Derivative: Δ^3 -Isomer, 2"-hydroxy, 6'-Me ether

Synonym(s): Xanthohumol D

CAS Registry Number: 274675-25-1

Molecular Formula: C₂₁H₂₂O₆

Molecular Weight: 370.401

Accurate Mass: 370.14164

Percentage Composition: C 68.10%; H 5.99%; O 25.92%

Biological Source: Isol. from *Humulus lupulus*

UV: [neutral] $\lambda_{\max}$ 369 (log ϵ 4.42) (MeOH)

>>Derivative: α,β -Dihydro, 6'-Me ether

Synonym(s): 2',4,4'-Trihydroxy-6'-methoxy-3'-prenyldihydrochalcone. α,β -Dihydroxanthohumol

CAS Registry Number: 102448-00-0

Molecular Formula: C₂₁H₂₄O₅

Molecular Weight: 356.418

Accurate Mass: 356.162375

Percentage Composition: C 70.77%; H 6.79%; O 22.44%

Biological Source: Constit. of hops (*Humulus lupulus*)

References:

- Verzele, M. *et al.*, *Bull. Soc. Chim. Belg.*, 1957, **66**, 452-475, (*isol, Xanthohumol*)
Hubner, H. *et al.*, *Chem. Ber.*, 1960, **93**, 312-317, (*4',6'-di-Me ether, synth*)
Vanderwalle, M. *et al.*, *Bull. Soc. Chim. Belg.*, 1961, **70**, 163-167, (*struct, synth*)
Orth, W.A. *et al.*, *Annalen*, 1963, **663**, 74-82, (*struct*)
Jain, A.C. *et al.*, *Tetrahedron*, 1978, **34**, 3563-3567, (*4,4',6'-tri-Me ether, 2',4,4'-tri-Me ether, synth*)
Sun, S.-S. *et al.*, *Phytochemistry*, 1989, **28**, 1776-1777, (*Xanthohumol, 4',6'-di-Me ether, isol*)
Tabata, N. *et al.*, *Phytochemistry*, 1997, **46**, 683-687, (*Xanthohumol, isol, pmr, cmr*)
Etteldorf, N. *et al.*, *Z. Naturforsch., C*, 1999, **54**, 610-612, (*Dihydroxanthohumol*)
Stevens, J.F. *et al.*, *Phytochemistry*, 2000, **53**, 759-775, (*Xanthohumol D, isol, occur*)