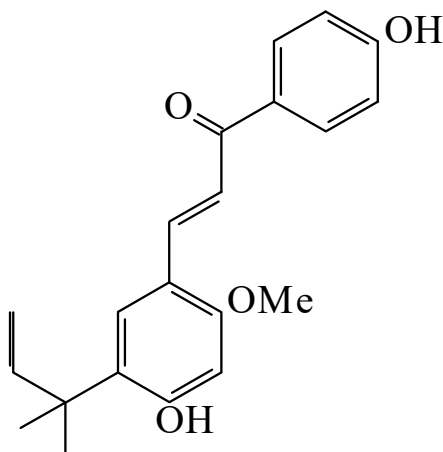




>>Entry Name: Licochalcone A

Synonym(s): 3-[5-(1,1-Dimethyl-2-propenyl)-4-hydroxy-2-methoxyphenyl]-1-(4-hydroxyphenyl)-2-propen-1-one, 9Cl. 5-(1,1-Dimethylallyl)-4,4'-dihydroxy-2-methoxychalcone



CAS Registry Number: 58749-22-7

Molecular Formula: C₂₁H₂₂O₄

Molecular Weight: 338.402

Accurate Mass: 338.15181

Percentage Composition: C 74.54%; H 6.55%; O 18.91%

Biological Source: Constit. of the roots of *Glycyrrhiza glabra*

Use/Importance: Antileishmanial and potent antimalarial activity. Also antiinflammatory and antitumourigenic effects. Reported to possess anti-HIV activity

Physical Description: Yellow needles

Melting Point: Mp 101-102°

Calculated Log P Data: Log P 4.26 (calc)

Other Data: Unusual 'retroflavonoid' hydroxylation pattern

References:

- Saitoh, T., *Tet. Lett.*, 1975, 4461; 4463, (*isol, struct, biosynth*)
Khan, S.A. *et al.*, *Indian J. Chem., Sect. B*, 1983, **22**, 276, (*synth*)
Hatano, T. *et al.*, *Chem. Pharm. Bull.*, 1988, **36**, 2286, (*activity*)
Shibata, S. *et al.*, *Planta Med.*, 1991, **57**, 221, (*pharmacol*)
Islam, A. *et al.*, *Indian J. Chem., Sect. B*, 1993, **32**, 713, (*synth*)
Chen, M. *et al.*, *Antimicrob. Agents Chemother.*, 1994, **38**, 1339; 1470, (*activity*)
Feldback, N. *et al.*, *Bioorg. Med. Chem. Lett.*, 1995, **5**, 449, (*synth*)