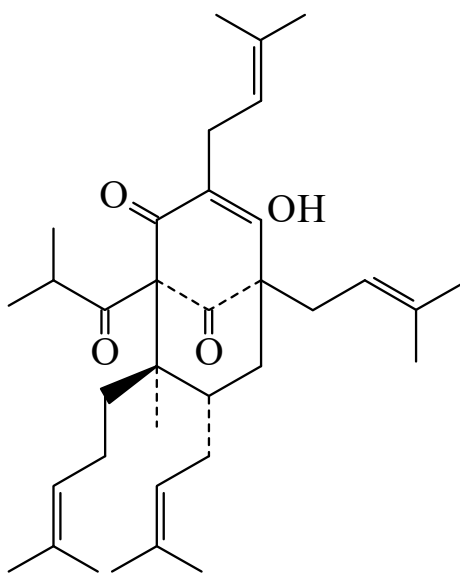




>>Entry Name: Hyperforin



CAS Registry Number: 11079-53-1

Molecular Formula: C₃₅H₅₂O₄

Molecular Weight: 536.793

Accurate Mass: 536.38656

Percentage Composition: C 78.31%; H 9.76%; O 11.92%

Biological Source: Constit. of *Hypericum perforatum* (St John's Wort)

Biological Use/Importance: Inhibits reuptake of neurotransmitters in synapses. Induces cytochrome P450 (*CYP3A4*) in hepatocytes. Antibiotic active against gram-positive and -negative bacteria. Antidepressant

Physical Description: Cryst.

Melting Point: Mp 79-80°

Optical Rotation: [α]_D¹⁸+41 (EtOH)

Solubility: BERDY SOL: Sol. C₆H₆

UV: [acid] $\lambda_{\max}$ 278 (ϵ 8400) (EtOH/HCl) (Derep) [base] $\lambda_{\max}$ 298 (ϵ 12000) (EtOH/NaOH) (Derep) [neutral] $\lambda_{\max}$ 278 (ϵ 8400) (EtOH/HCl) (Derep) [neutral] $\lambda_{\max}$ 278 (ϵ 8200); 298 (ϵ 11000) (EtOH) (Berdy) [acid] $\lambda_{\max}$ 278 (ϵ 8400) (EtOH-HCl) (Berdy) [base] $\lambda_{\max}$ 298 (ϵ 12000) (EtOH-NaOH) (Berdy)

References:

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Bystrov, N.S. *et al.*, *Bioorg. Khim.*, 1978, **4**, 791, (*struct*)

Brondz, I. *et al.*, *Tet. Lett.*, 1982, **23**, 1299, (*cryst struct*)

Linde, K. *et al.*, *Br. Med. J.*, 1996, **313**, 253-258, (*clin trial*)

Schempp, C.M. *et al.*, *Lancet*, 1999, **i**, 2129, (*activity*)

Moore, L.B. *et al.*, *Proc. Natl. Acad. Sci. U.S.A.*, 2000, **97**, 7500-7502, (*pharmacol*)