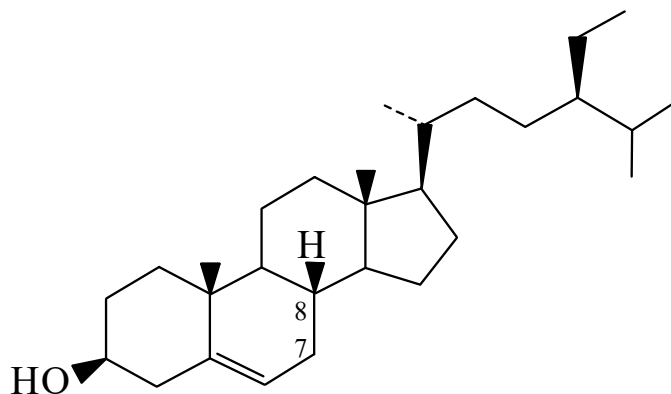




>>Entry Name: Stigmast-5-en-3-ol

ENTRY UNDER REVIEW

Synonym(s): 24-Ethylcholest-5-en-3-ol



Related CAS Registry Numbers(s): 19044-06-5

Molecular Formula: C₂₉H₅₀O

Molecular Weight: 414.713

Accurate Mass: 414.386165

Percentage Composition: C 83.99%; H 12.15%; O 3.86%

Use/Importance: Antihypercholesterolaemic, estrogenic agent

Calculated Log P Data: Log P 10.45 (uncertain value) (calc)

>>Variant: (3 β ,24*R*)-form

Synonym(s): β -Sitosterol. Nimbosterol. Cupreol. Quebrachol. Rhamnol. Cinchol. Verosterol. Slanutosterol. Raphanisterol. Papaveristerol. Sitosterol. **Angelicin**†. 22,23-Dihydrostigmasterol

CAS Registry Number: 83-46-5

Molecular Formula: C₂₉H₅₀O

Molecular Weight: 414.713

Accurate Mass: 414.386165

Percentage Composition: C 83.99%; H 12.15%; O 3.86%

Biological Source: Widely distributed in plants. The commonest sterol of higher plants

Use/Importance: Hypolipidaemic agent

Physical Description: Cryst. (MeOH)

Melting Point: Mp 136-137°

Optical Rotation: $[\alpha]_D^{22}$ -35 (CHCl₃)

Calculated Log P Data: Log P 10.45 (uncertain value) (calc)

Other Data: Pharmacol. active isomer. Early isolates usually contd. *ca.* 5-30% campesterol

Hazard & Toxicity: Exp. reprod. effects

Aldrich: S340-2

Fluka: 85450

Sigma: S1270

Supelco: R42-6660

>>Derivative: 3-*O*-Sulfate

Molecular Formula: C₂₉H₅₀O₄S

Molecular Weight: 494.778

Accurate Mass: 494.34298

Percentage Composition: C 70.40%; H 10.19%; O 12.93%; S 6.48%

Melting Point: Mp 151-152° (as Na salt)

>>Derivative: *O*- β -D-Xylopyranoside

Synonym(s): Sitosterol 3- β -D-xyloside

CAS Registry Number: 93772-33-9

Molecular Formula: C₃₄H₅₈O₅

Molecular Weight: 546.829

Accurate Mass: 546.428425

Percentage Composition: C 74.68%; H 10.69%; O 14.63%

Biological Source: Isol. from the aerial parts of *Bauhinia candicans*