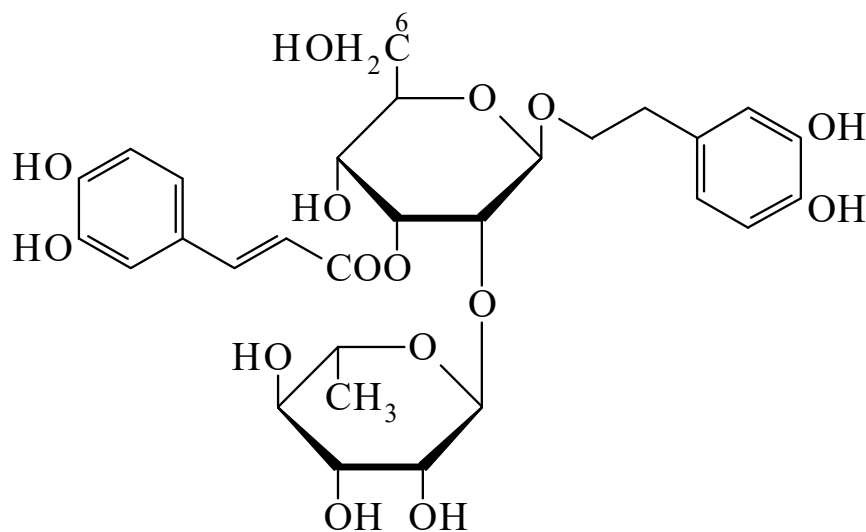




>>Entry Name: Magnoloside A



CAS Registry Number: 113557-95-2

Molecular Formula: C₂₉H₃₆O₁₅

Molecular Weight: 624.594

Accurate Mass: 624.205425

Percentage Composition: C 55.77%; H 5.81%; O 38.42%

Biological Source: Isol. from the methanolic extracts of the dried bark of *Magnolia obovata*

Use/Importance: *M. obovata* bark is a japanese traditional medicine used for neurosis and gastrointestinal complaints

Physical Description: Powder

Optical Rotation: [α]_D¹⁸ -36.8 (c, 0.82 in EtOH)

Solubility: BERDY SOL: Sol. MeOH, CHCl₃

UV: [neutral] $\lambda_{\max}$ 217 (ϵ 15600); 240 (ϵ 8100); 290 (ϵ 9900); 330 (ϵ 13500) (EtOH) (Berdy)

>>Derivative: 6-O- β -D-Glucopyranosyl

Synonym(s): Magnoloside B

CAS Registry Number: 116872-05-0

Molecular Formula: C₃₅H₄₆O₂₀

Molecular Weight: 786.736

Accurate Mass: 786.25825

Percentage Composition: C 53.43%; H 5.89%; O 40.67%

Biological Source: Isol. from *Magnolia obovata* bark

Optical Rotation: [α]_D -54.1 (c, 0.92 in EtOH)

Solubility: BERDY SOL: Sol. MeOH, CHCl₃

UV: [neutral] $\lambda_{\max}$ 218 (ϵ 18770); 242 (ϵ 9985); 290 (ϵ 12380); 330 (ϵ 17170) (EtOH) (Berdy)

>>Derivative: 6-O-[β -D-Glucopyranosyl(1 $\rightarrow$ 4)- β -D-glucopyranosyl]

Synonym(s): Magnoloside C

CAS Registry Number: 116872-04-9

Molecular Formula: C₄₁H₅₆O₂₅

Molecular Weight: 948.878

Accurate Mass: 948.311075

Percentage Composition: C 51.90%; H 5.95%; O 42.15%

Biological Source: Isol. from *Magnolia obovata* bark

Optical Rotation: [α]_D -73.2 (c, 0.41 in EtOH)

Solubility: BERDY SOL: Sol. MeOH, CHCl₃

UV: [neutral] $\lambda_{\max}$ 218 (ϵ 16500); 244 (ϵ 8880); 290 (ϵ 10740); 330 (ϵ 14950) (EtOH) (Berdy)

References:

Hasegawa, T. *et al.*, *Chem. Lett.*, 1988, 163, (isol, struct, pmr, cmr, ir, uv, ms)

Hasegawa, T. *et al.*, *Chem. Pharm. Bull.*, 1988, **36**, 1245, (isol, cmr)

Japan. Pat., 1988, 88 310 899; *CA*, **111**, 102688h