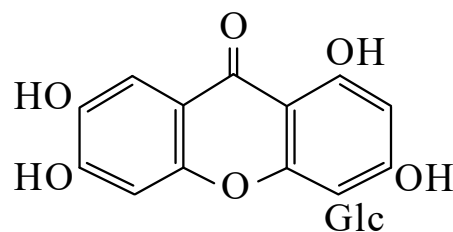




>>Entry Name: Isomangiferin

Synonym(s): 4-β-D-Glucopyranosyl-1,3,6,7-tetrahydroxy-9*H*-xanthen-9-one, 9Cl. 4-Glucosyl-1,3,6,7-tetrahydroxyxanthone



CAS Registry Number: 24699-16-9

Molecular Formula: C₁₉H₁₈O₁₁

Molecular Weight: 422.345

Accurate Mass: 422.084915

Percentage Composition: C 54.03%; H 4.30%; O 41.67%

Biological Source: Constit. of *Anemarrhena asphodeloides*, *Hedysarum flavescens*, *Mangifera indica* and *Iris unguicularis*. Widespread in ferns and apparently randomly

Physical Description: Pale-yellow needles (MeOH)

Melting Point: Mp 260 dec.°

Optical Rotation: [α]_D +5.5 (Py)

>>Derivative: Octa-Ac

Molecular Formula: C₃₅H₃₄O₁₉

Molecular Weight: 758.642

Accurate Mass: 758.169435

Percentage Composition: C 55.41%; H 4.52%; O 40.07%

Physical Description: Cryst. (CHCl₃/hexane)

Melting Point: Mp 203-204°

Optical Rotation: [α]_D -64.7 (CHCl₃)

>>Derivative: *O*-β-D-Glucopyranosyl (1)

Synonym(s): Glucoisomangiferin. 4-*O*-(Glucosylglucosyl)-1,3,6,7-tetrahydroxyxanthone

CAS Registry Number: 50315-13-4

Molecular Formula: C₂₅H₂₈O₁₆

Molecular Weight: 584.487

Accurate Mass: 584.13774

Percentage Composition: C 51.37%; H 4.83%; O 43.80%

Biological Source: Isol. from *Hedysarum flavescens*

>>Derivative: *O*-β-D-Glucopyranosyl (2)

Synonym(s): Isomangiferin *O*-glucoside

Molecular Formula: C₂₅H₂₈O₁₆

Molecular Weight: 584.487

Accurate Mass: 584.13774

Percentage Composition: C 51.37%; H 4.83%; O 43.80%

Biological Source: Isol. from *Asplenium montanum*

Other Data: A disaccharide of partially detd. struct. having a further Glc residue attached to the glucosyl group. Not clear if this is identical with Glucoisomangiferin

>>Derivative: 3-Me ether

Synonym(s): 3-*O*-Methylisomangiferin. Isochinomin

CAS Registry Number: 83118-66-5

Molecular Formula: C₂₀H₂₀O₁₁

Molecular Weight: 436.371

Accurate Mass: 436.100565

Percentage Composition: C 55.05%; H 4.62%; O 40.33%

Biological Source: Constit. of *Cystopteris fragilis* and *Mangifera indica*

Other Data: Trivial name is misleading

>>Derivative: 7-Me ether

Synonym(s): 7-*O*-Methylisomangiferin