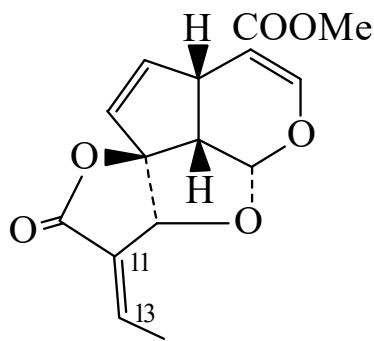




>>Entry Name: **Plumericin**



CAS Registry Number: 77-16-7

Molecular Formula: C₁₅H₁₄O₆

Molecular Weight: 290.272

Accurate Mass: 290.07904

Percentage Composition: C 62.07%; H 4.86%; O 33.07%

Biological Source: Isol. from *Plumeria* spp. and from *Cliona caribboea*

Use/Importance: Shows antibiotic, antifungal and antineoplastic activity

Physical Description: Platelike needles (C₆H₆)

Melting Point: Mp 212.5-213.5 sl. dec.°

Optical Rotation: [α]_D³⁰ +204 (CHCl₃)

Solubility: BERDY SOL: Sol. CHCl₃; fairly sol. MeOH, C₆H₆, bases, Me₂CO, EtOH, Et₂O; poorly sol. H₂O, acids, hexane

Calculated Log P Data: Log P -0.34 (uncertain value) (calc)

UV: [neutral] $\lambda_{\max}$ 215 (ϵ 17400); 240 (sh) (ϵ 15800) (EtOH) (Derep) [neutral] $\lambda_{\max}$ 215 (ϵ 17380) (MeOH) (Berdy) [neutral] $\lambda_{\max}$ 212 (ϵ 32600) (EtOH) (Berdy)

Other Data: Related to Plumieride [JPP67-P](#)

>>Derivative: (11*Z*)-Isomer

Synonym(s): Isoplumericin

CAS Registry Number: 31298-76-7

Molecular Formula: C₁₅H₁₄O₆

Molecular Weight: 290.272

Accurate Mass: 290.07904

Percentage Composition: C 62.07%; H 4.86%; O 33.07%

Biological Source: Isol. from roots of *Plumeria rubra*

Use/Importance: Antineoplastic agent

Physical Description: Cryst. (CH₂Cl₂/toluene)

Melting Point: Mp 200.5-201.5°

Optical Rotation: [α]_D²⁵ +216.4 (c, 1.01 in CHCl₃)

Calculated Log P Data: Log P -0.34 (uncertain value) (calc)

UV: [neutral] $\lambda_{\max}$ 215 (ϵ 17400); 240 (sh) (ϵ 15800) (EtOH) (Derep) [neutral] $\lambda_{\max}$ 215 (ϵ 16980) (EtOH) (Berdy)

>>Derivative: 11*S*,13-Dihydro

Synonym(s): β -Dihydroplumericin

Molecular Formula: C₁₅H₁₆O₆

Molecular Weight: 292.288

Accurate Mass: 292.09469

Percentage Composition: C 61.64%; H 5.52%; O 32.84%

Biological Source: Isol. from roots of *Plumeria rubra*

Physical Description: Cryst. (Et₂O/pentane or by subl.)

Melting Point: Mp 150-151°

Optical Rotation: [α]_D²² +275.5 (CHCl₃)

>>Derivative: 11*S*,13-Dihydro, parent acid

Synonym(s): β -Dihydroplumericinic acid

Molecular Formula: C₁₄H₁₄O₆

Molecular Weight: 278.261

Accurate Mass: 278.07904

Percentage Composition: C 60.43%; H 5.07%; O 34.50%

Biological Source: Isol. from roots of *Plumeria rubra*

Melting Point: Mp 189-190 dec.°