



Molecular Formula: C₃₂H₄₄O₈

Molecular Weight: 556.695

Accurate Mass: 556.30362

Percentage Composition: C 69.04%; H 7.97%; O 22.99%

Biological Source: Constit. of *Ecballium elaterium*, *Canoea scoparoides*, *Citrullus* and *Luffa* spp.

Biological Use/Importance: Cell adhesion inhibitor

Melting Point: Mp 234°

Optical Rotation: $[\alpha]_D^{20}$ -64.3 (CHCl₃)

UV: [neutral] $\lambda_{\max}$ 233 (ϵ 11700); 234 (); 267 (ϵ 8400); 269 () (EtOH) (Berdy)

Hazard & Toxicity: BERDY HAZD : LD₅₀ (mus, ipr) 2 mg/kg

>> **Derivative:** 25-Ac, 2-O- β -D-glucopyranoside

Synonym(s): Elaterinide. Colocynthin. Gratiotoxin

CAS Registry Number: 1398-78-3

Molecular Formula: C₃₈H₅₄O₁₃

Molecular Weight: 718.837

Accurate Mass: 718.356445

Percentage Composition: C 63.49%; H 7.57%; O 28.93%

Biological Source: Constit. of *Citrullus lanatus* and *Citrullus colocynthis*

Melting Point: Mp 148-150°

Optical Rotation: $[\alpha]_D^{20}$ -63.5 (CHCl₃)

Solubility: BERDY SOL: Sol. EtOH, CHCl₃, Me₂CO; fairly sol. Et₂O, H₂O

UV: [neutral] $\lambda_{\max}$ 235 (ϵ 12900) (EtOH) (Berdy)

>> **Derivative:** 23,24-Dihydro

Synonym(s): 2,16,20,25-Tetrahydroxycucurbita-1,5-diene-3,11,22-trione. 16,20,25-Trihydroxycucurbit-5-ene-2,3,11,22-tetrone. **Cucurbitacin L**

CAS Registry Number: 1110-02-7

Molecular Formula: C₃₀H₄₄O₇

Molecular Weight: 516.673

Accurate Mass: 516.308705

Percentage Composition: C 69.74%; H 8.58%; O 21.68%

Biological Source: Constit. of *Citrullus ecirrhosus* and *Citrullus colocynthis*, *Gratiola officinalis* and *Bryonia dioica*

Physical Description: Cryst. + ½H₂O (MeOH aq.)

Melting Point: Mp 122-127°

Optical Rotation: $[\alpha]_D^{28}$ -41 (EtOH)

UV: [neutral] $\lambda_{\max}$ 270 (ϵ 8050) (EtOH) (Berdy)

>> **Derivative:** 23,24-Dihydro, 2-O- β -D-glucopyranoside

Synonym(s): Bryoamaride

CAS Registry Number: 61105-51-9

Molecular Formula: C₃₆H₅₄O₁₂

Molecular Weight: 678.815

Accurate Mass: 678.36153

Percentage Composition: C 63.70%; H 8.02%; O 28.28%

Biological Source: Constit. of *Bryonia dioica* and *Citrullus colocynthis*

Melting Point: Mp 228-235°

Optical Rotation: $[\alpha]_D^{20}$ -85.7 (c, 0.82 in EtOH)