



Molecular Formula: C₂₀H₂₈O₄
Molecular Weight: 332.439
Accurate Mass: 332.19876
Percentage Composition: C 72.26%; H 8.49%; O 19.25%
Biological Source: Constit. of *Eupatorium album*, *Pteris dispar*, *Stevia paniculata* and others
Physical Description: Cryst. (MeOH)
Melting Point: Mp 268-270°
Optical Rotation: [α]_D²² -150 (c, 0.022 in MeOH)

>> **Derivative:** 15-Ketone, β -D-glucopyranosyl ester
Synonym(s): **Paniculoside III**

CAS Registry Number: 60129-65-9

Molecular Formula: C₂₆H₃₈O₉
Molecular Weight: 494.581
Accurate Mass: 494.251585
Percentage Composition: C 63.14%; H 7.74%; O 29.11%
Biological Source: Isol. from *Stevia paniculata* and *Pteris* spp
Physical Description: Cryst. (MeOH)
Melting Point: Mp 153-157°
Optical Rotation: [α]_D²³ -125.4 (c, 0.2 in MeOH)

>> **Derivative:** 15-Ac, 19- β -D-glucopyranosyl ester
Synonym(s): **Adenostemmoside A**

Molecular Formula: C₂₈H₄₂O₁₀
Molecular Weight: 538.634
Accurate Mass: 538.2778
Percentage Composition: C 62.44%; H 7.86%; O 29.70%
Biological Source: Constit. of *Adenostemma lavenia*
Physical Description: Amorph. powder
Optical Rotation: [α]_D²² -97 (c, 1 in MeOH)

>> **Variant:** (*ent*-11 α ,15 β)-form
Synonym(s): **Adenostemmoic acid A**

Molecular Formula: C₂₀H₃₀O₄
Molecular Weight: 334.455
Accurate Mass: 334.21441
Percentage Composition: C 71.82%; H 9.04%; O 19.13%
Biological Source: Constit. of *Adenostemma lavenia*
Physical Description: Needles (MeOH)
Melting Point: Mp 198-201°
Optical Rotation: [α]_D²² -110 (c, 0.35 in MeOH)
UV: [neutral] $\lambda_{\max}$ 243 (ϵ 6025) (MeOH) (Berdy)

References:

- Murakami, T. *et al.*, *Chem. Pharm. Bull.*, 1976, **24**, 549, (*isol*)
Kohda, H. *et al.*, *Chem. Pharm. Bull.*, 1976, **24**, 1040, (*isol*)
Herz, W. *et al.*, *J.O.C.*, 1976, **41**, 1021, (*isol*)
Yamasaki, K. *et al.*, *Chem. Pharm. Bull.*, 1977, **25**, 2895, (*isol*, *cmr*)
Cheng, P.C. *et al.*, *J. Nat. Prod.*, 1979, **42**, 183, (*isol*)
Shimizu, S. *et al.*, *Chem. Pharm. Bull.*, 1990, **38**, 1308, (*Adenostemmoside A*)