



Melting Point: Mp 154° (132°)
Optical Rotation: $[\alpha]_{\text{D}}^{20} +23.7$ (c, 0.18 in CHCl₃). $[\alpha]_{\text{D}}^{20} +183$ (c, 1.84 in CHCl₃)

>>**Derivative:** 11β,13-Dihydro, Ac
Synonym(s): Acetylbalchanolide

Molecular Formula: C₁₇H₂₄O₄
Molecular Weight: 292.374
Accurate Mass: 292.16746
Percentage Composition: C 69.84%; H 8.27%; O 21.89%
Biological Source: Constit. of yarrow (*Achillea millefolium*)
Physical Description: Cryst. (diisopropyl ether)
Melting Point: Mp 125°
Optical Rotation: $[\alpha]_{\text{D}}^{20} +128.1$ (c, 3.8 in CHCl₃)

>>**Variant:** (1(10)*E*,4*E*,6α,8β)-form
Synonym(s): Eupatolide

CAS Registry Number: 6750-25-0

Molecular Formula: C₁₅H₂₀O₃
Molecular Weight: 248.321
Accurate Mass: 248.141245
Percentage Composition: C 72.55%; H 8.12%; O 19.33%
Biological Source: Constit. of *Eupatorium formosanum* and *Eupatorium cannabinum*
Use/Importance: Antineoplastic agent
Physical Description: Cryst. (EtOAc/Et₂O)
Melting Point: Mp 187-188°
Optical Rotation: $[\alpha]_{\text{D}}^{22} +20$ (c, 0.011 in Me₂CO)
Calculated Log P Data: Log P 1.5 (calc)

>>**Derivative:** Ac
Synonym(s): Epitulipinolide

CAS Registry Number: 24164-13-4

Molecular Formula: C₁₇H₂₂O₄
Molecular Weight: 290.358
Accurate Mass: 290.15181
Percentage Composition: C 70.32%; H 7.64%; O 22.04%
Biological Source: Isol. from *Liriodendron tulipifera*
Use/Importance: Antineoplastic agent
Physical Description: Cryst. (petrol)
Melting Point: Mp 91-92°
Optical Rotation: $[\alpha]_{\text{D}}^{25} +75$ (c, 3.2 in CHCl₃)
Calculated Log P Data: Log P 2.45 (calc)

>>**Derivative:** 8-(2-Hydroxymethyl-2*E*-butenoyl)

CAS Registry Number: 70550-00-4

Molecular Formula: C₂₀H₂₆O₅
Molecular Weight: 346.422
Accurate Mass: 346.178025
Percentage Composition: C 69.34%; H 7.56%; O 23.09%
Biological Source: Constit. of *Eupatorium serotinum*
Physical Description: Cryst. (MeOH)
Melting Point: Mp 110°
Optical Rotation: $[\alpha]_{\text{D}}^{22} +47.5$ (c, 0.12 in CHCl₃)