



Biological Source: Constit. of *Taxus x media* cv. Hicksii and of *Taxus yunnanensis*

Physical Description: Powder or cryst.

Melting Point: Mp 184-186°

Optical Rotation: $[\alpha]_{\text{D}}^{25} -48$ (c, 0.1 in MeOH). $[\alpha]_{\text{D}}^{20} -79.5$ (c, 0.515 in MeOH)

UV: [neutral] λ_{max} 230 (log ϵ 4.21); 274 (log ϵ 3.01) (MeOH)

Other Data: The two samples have been assigned the same struct. although their props. differ considerably. The lower Mp, higher opt. rotn. and the uv spectrum refer to Taxoline from *T. yunnanensis*

>>**Derivative:** *N*-Debenzoyl, *N*-hexanoyl

Synonym(s): Taxol C. Taxuyunnanine A

CAS Registry Number: 153415-45-3

Molecular Formula: C₄₆H₅₇NO₁₄

Molecular Weight: 847.955

Accurate Mass: 847.377909

Percentage Composition: C 65.16%; H 6.78%; N 1.65%; O 26.42%

Biological Source: From roots of *Taxus x media* cv Hicksii, *Taxus yunnanensis* and cell cultures of *Taxus baccata* (Taxaceae)

Biological Use/Importance: Shows potent selective cytotoxicity vs. NCI human cell line

Physical Description: Cryst. (MeOAc/hexane) or yellowish amorph. solid (MeOH)

Melting Point: Mp 204-205° (150°)

Optical Rotation: $[\alpha]_{\text{D}}^{20} -64.7$ (c, 1.2 in CHCl₃). $[\alpha]_{\text{D}} -107$ (c, 0.054 in MeOH)

UV: [neutral] λ_{max} 227 (ϵ 29800); 273 (ϵ 1700) (MeOH) (Derep) [neutral] λ_{max} 227 (ϵ 15490) (MeOH) (Berdy)

>>**Derivative:** *N*-Debenzoyl, *N*-hexanoyl, 7-*O*- β -D-xylopyranoside

Synonym(s): 7-Xylosyltaxol C

CAS Registry Number: 90332-67-5

Molecular Formula: C₅₁H₆₅NO₁₈

Molecular Weight: 980.07

Accurate Mass: 979.420169

Percentage Composition: C 62.50%; H 6.68%; N 1.43%; O 29.38%

Biological Source: Constit. of *Taxus baccata*

Physical Description: Cryst. (EtOH aq.)

Melting Point: Mp 229-231°

Optical Rotation: $[\alpha]_{\text{D}} -4$ (Py)

UV: [neutral] λ_{max} 227 (ϵ 29800); 273 (ϵ 1700) (MeOH) (Derep)

>>**Derivative:** *N*-Debenzoyl, *N*-hexanoyl, 10-de-Ac

Synonym(s): 10-Deacetyltaxol C. 10-Deacetyltaxuyunnanine A

CAS Registry Number: 154677-95-9

Molecular Formula: C₄₄H₅₅NO₁₃

Molecular Weight: 805.917

Accurate Mass: 805.367344

Percentage Composition: C 65.58%; H 6.88%; N 1.74%; O 25.81%

Biological Source: From cell cultures of *Taxus baccata* and from *Taxus yunnanensis* (Taxaceae)

Physical Description: Amorph. solid (MeOH)

Melting Point: Mp 157 dec.°

Optical Rotation: $[\alpha]_{\text{D}} -14.78$ (c, 0.115 in MeOH)

UV: [neutral] λ_{max} 227 (ϵ 29800); 273 (ϵ 1700) (MeOH) (Derep) [neutral] λ_{max} 236 (); 272 () (MeOH) (Berdy)

>>**Derivative:** *N*-Debenzoyl, *N*-hexanoyl, 10-de-Ac, 7-*O*- β -D-xylopyranoside

Synonym(s): 10-Deacetyl-7-xylosyltaxol C

CAS Registry Number: 90332-65-3

Molecular Formula: C₄₉H₆₃NO₁₇

Molecular Weight: 938.033

Accurate Mass: 937.409604

Percentage Composition: C 62.74%; H 6.77%; N 1.49%; O 29.00%

Biological Source: Constit. of *Taxus baccata*

Physical Description: Cryst. (EtOH aq.)

Melting Point: Mp 215-217°

Optical Rotation: $[\alpha]_{\text{D}} +3$ (Py)

UV: [neutral] λ_{max} 227 (ϵ 29800); 273 (ϵ 1700) (MeOH) (Derep)