



Percentage Composition: C 64.66%; H 7.03%; N 2.79%; O 25.52%
Biological Source: Alkaloid from *Cephalotaxus hainanensis* (Cephalotaxaceae)
Melting Point: Mp 219-220°
UV: [neutral] $\lambda_{\max}$ 291 (ϵ 2290) (MeOH) (Berdy)

>>**Derivative:** 1''S-Hydroxy, parent acid

Synonym(s): 1''S-Hydroxy-3''-des-*O*-methyhharringtonine. 3'S-Hydroxy-5'-des-*O*-methyhharringtonine

CAS Registry Number: 182325-74-2

Molecular Formula: C₂₇H₃₅NO₁₀
Molecular Weight: 533.574
Accurate Mass: 533.226099
Percentage Composition: C 60.78%; H 6.61%; N 2.63%; O 29.99%
Biological Source: From leaves and stems of *Cephalotaxus harringtonia* var. *drupacea*
Physical Description: Amorph. solid
Optical Rotation: [α]_D -91 (c, 1.00 in DMSO)
UV: [neutral] $\lambda_{\max}$ 288 (ϵ 3311) (MeOH) (Berdy)

>>**Derivative:** 5'-Deoxy, 11 β -hydroxy

Synonym(s): 11 β -Hydroxydeoxyharringtonine

Molecular Formula: C₂₈H₃₇NO₉
Molecular Weight: 531.602
Accurate Mass: 531.246834
Percentage Composition: C 63.26%; H 7.02%; N 2.63%; O 27.09%
Biological Source: Isol. from *Cephalotaxus harringtonia* var. *drupacea*
Biological Use/Importance: Shows antileukaemic activity against P-388 cells
Physical Description: Oil
Optical Rotation: [α]_D²⁵ -77 (c, 0.085 in MeOH)
UV: [neutral] $\lambda_{\max}$ 290 (log ϵ 3.3) (MeOH) [neutral] $\lambda_{\max}$ 290 (ϵ 1995) (MeOH) (Berdy)

>>**Derivative:** Homologue (n = 1), 5'-deoxy

Synonym(s): Nordeoxyharringtonine

Molecular Formula: C₂₇H₃₅NO₈
Molecular Weight: 501.575
Accurate Mass: 501.236269
Percentage Composition: C 64.66%; H 7.03%; N 2.79%; O 25.52%
Biological Source: Alkaloid from leaves and stems of *Cephalotaxus harringtonia* var. *drupacea*
Biological Use/Importance: Cytotoxic against P-388 leukaemia
Physical Description: Pale yellowish oil
Optical Rotation: [α]_D -90 (c, 0.07 in MeOH)
UV: [neutral] $\lambda_{\max}$ 291 (log ϵ 3.36) (MeOH)

>>**Derivative:** Homologue (n = 3)

Synonym(s): Homoharringtonine. NSC 141633

CAS Registry Number: 26833-87-4

Molecular Formula: C₂₉H₃₉NO₉
Molecular Weight: 545.628
Accurate Mass: 545.262484
Percentage Composition: C 63.84%; H 7.20%; N 2.57%; O 26.39%
Biological Source: Alkaloid from *Cephalotaxus harringtonia* var. *harringtonia*, *Cephalotaxus harringtonia* var. *drupacea*, *Cephalotaxus fortunei*, *Cephalotaxus hainanensis* and *Cephalotaxus sinensis* (Cephalotaxaceae)
Use/Importance: Shows antitumour activity comparable with that of Harringtonine. Has been used clinically against acute myelocytic leukaemia
Melting Point: Mp 144-146°
Optical Rotation: [α]_D -119 (c, 0.96 in CHCl₃)
Calculated Log P Data: Log P 1.05 (uncertain value) (calc)
UV: [neutral] $\lambda_{\max}$ 261 (ϵ 724); 290 (ϵ 4570) (EtOH) (Derep)
Hazard & Toxicity: Adverse systemic effects when used therapeutically. LD₅₀ (mus, orl) 7.456 mg/kg

Sigma: H0635