



**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 ( $\epsilon$  2290) (MeOH) (Berdy)

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

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

**CAS Registry Number:** 182325-74-2

**Molecular Formula:** C<sub>27</sub>H<sub>35</sub>NO<sub>10</sub>  
**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:** [ $\alpha$ ]<sub>D</sub> -91 (c, 1.00 in DMSO)  
**UV:** [neutral]  $\lambda_{\max}$  288 ( $\epsilon$  3311) (MeOH) (Berdy)

>>**Derivative:** 5'-Deoxy, 11 $\beta$ -hydroxy

**Synonym(s):** 11 $\beta$ -Hydroxydeoxyharringtonine

**Molecular Formula:** C<sub>28</sub>H<sub>37</sub>NO<sub>9</sub>  
**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:** [ $\alpha$ ]<sub>D</sub><sup>25</sup> -77 (c, 0.085 in MeOH)  
**UV:** [neutral]  $\lambda_{\max}$  290 (log  $\epsilon$  3.3) (MeOH) [neutral]  $\lambda_{\max}$  290 ( $\epsilon$  1995) (MeOH) (Berdy)

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

**Synonym(s):** Nordeoxyharringtonine

**Molecular Formula:** C<sub>27</sub>H<sub>35</sub>NO<sub>8</sub>  
**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:** [ $\alpha$ ]<sub>D</sub> -90 (c, 0.07 in MeOH)  
**UV:** [neutral]  $\lambda_{\max}$  291 (log  $\epsilon$  3.36) (MeOH)

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

**Synonym(s):** Homoharringtonine. NSC 141633

**CAS Registry Number:** 26833-87-4

**Molecular Formula:** C<sub>29</sub>H<sub>39</sub>NO<sub>9</sub>  
**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:** [ $\alpha$ ]<sub>D</sub> -119 (c, 0.96 in CHCl<sub>3</sub>)  
**Calculated Log P Data:** Log P 1.05 (uncertain value) (calc)  
**UV:** [neutral]  $\lambda_{\max}$  261 ( $\epsilon$  724); 290 ( $\epsilon$  4570) (EtOH) (Derep)  
**Hazard & Toxicity:** Adverse systemic effects when used therapeutically. LD<sub>50</sub> (mus, orl) 7.456 mg/kg

**Sigma:** H0635