



Optical Rotation: $[\alpha]_{\text{D}} -76$ (MeOH)

>>Derivative: O^3 - β -D-Glucopyranoside

Synonym(s): Pseudojervine

CAS Registry Number: 36069-05-3

Molecular Formula: $\text{C}_{33}\text{H}_{49}\text{NO}_8$

Molecular Weight: 587.752

Accurate Mass: 587.345819

Percentage Composition: C 67.44%; H 8.40%; N 2.38%; O 21.78%

Biological Source: Alkaloid from *Veratrum album* and some other *Veratrum* spp. (Liliaceae)

Melting Point: Mp 300-301°

Optical Rotation: $[\alpha]_{\text{D}} -131$ ($\text{CHCl}_3/\text{EtOH}$ 1:1). $[\alpha]_{\text{D}}^{25} -97$ (c, 0.12 in $\text{CHCl}_3/\text{EtOH}$)

Solubility: BERDY SOL: Sol. CHCl_3 , C_6H_6 ; fairly sol. EtOH; poorly sol. Et_2O

Hazard & Toxicity: BERDY HAZD : LD₅₀ (mus, ivn) 50 - 150 mg/kg

>>Derivative: 3-Ketone

Synonym(s): Jervinone

Molecular Formula: $\text{C}_{27}\text{H}_{37}\text{NO}_3$

Molecular Weight: 423.594

Accurate Mass: 423.277344

Percentage Composition: C 76.56%; H 8.80%; N 3.31%; O 11.33%

Biological Source: Alkaloid from rhizomes of *Veratrum album* (Liliaceae)

Physical Description: Amorph. powder

Melting Point: Mp 246-248°

Optical Rotation: $[\alpha]_{\text{D}}^{25} +38.5$ (c, 1.00 in CHCl_3)

>>Derivative: 11 β -Alcohol

Synonym(s): Veratrobazine. Jervin-11 β -ol

CAS Registry Number: 20226-97-5

Molecular Formula: $\text{C}_{27}\text{H}_{41}\text{NO}_3$

Molecular Weight: 427.626

Accurate Mass: 427.308644

Percentage Composition: C 75.84%; H 9.66%; N 3.28%; O 11.22%

Biological Source: Alkaloid from *Veratrum album* (Liliaceae)

Physical Description: Large prisms ($\text{C}_6\text{H}_6/\text{MeOH}$)

Melting Point: Mp 285-288° (dec. from 270°)

Optical Rotation: $[\alpha]_{\text{D}} -76.6$ (c, 0.58 in 95% EtOH). $[\alpha]_{\text{D}}^{20} -126$ (c, 0.65 in Py)

Hazard & Toxicity: Teratogenic

>>Derivative: 11 β -Alcohol, 3,11-di-Ac

Melting Point: Mp 208-210°

Optical Rotation: $[\alpha]_{\text{D}}^{20} -77$ (c, 0.46 in Py)

>>Derivative: 11-Deoxo

Synonym(s): Cyclopamine. Alkaloid V. 11-Deoxojervine

CAS Registry Number: 4449-51-8

Molecular Formula: $\text{C}_{27}\text{H}_{41}\text{NO}_2$

Molecular Weight: 411.626

Accurate Mass: 411.313729

Percentage Composition: C 78.78%; H 10.04%; N 3.40%; O 7.77%

Biological Source: Isol. from *Veratrum californicum* and *Veratrum album* (Liliaceae)

Use/Importance: Severe teratogen responsible for cyclopic malformation in sheep grazing on *V. californicum*

Physical Description: Needles (EtOH)

Melting Point: Mp 237-238°

Optical Rotation: $[\alpha]_{\text{D}}^{25} -48$ (c, 1 in $\text{MeOH}/\text{CHCl}_3$ 2:1)

Hazard & Toxicity: Exp. reprod. and teratogenic effects