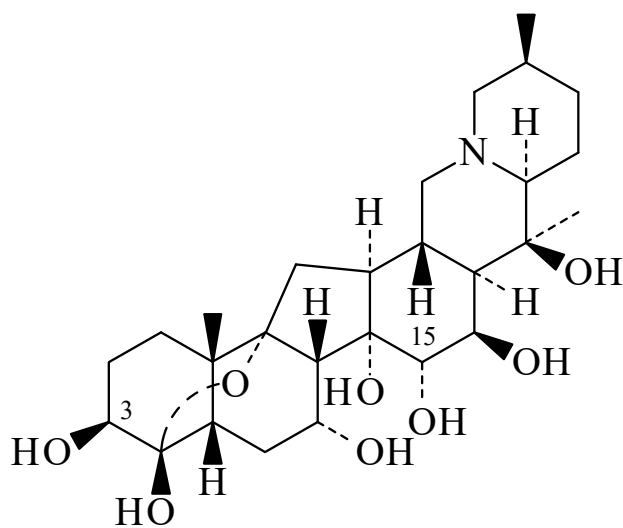




>>Entry Name: **Germinine**

Synonym(s): 4,9-Epoxy-3,4,7,14,15,16,20-cevaneheptol, 9CI



Absolute
conf guration

CAS Registry Number: 508-65-6

Related CAS Registry Numbers(s): 36506-68-0

Molecular Formula: $C_{27}H_{43}NO_8$

Molecular Weight: 509.639

Accurate Mass: 509.298869

Percentage Composition: C 63.63%; H 8.50%; N 2.75%; O 25.11%

Biological Source: Alkaloid from *Veratrum viride* and other *Veratrum* spp. and *Zygadenus venenosus* (Liliaceae)

Use/Importance: Potent hypotensive agent with characteristic heart action, causing irregularity and prolongation of the beat. Also affects nerve impulses. Derivs. have been used to treat myasthenia gravis. Esters are hypotensive agents, with Germitrine being the most active of the nat. alkaloids. Many semisynthetic esters have also been evaluated. They show strong emetic activity with freq. an unacceptably narrow range of therapeutic usefulness

Melting Point: Mp 219-220°

Optical Rotation: $[\alpha]_D^{25} +5$ (EtOH)

Other Data: Forms MeOH solvate which loses MeOH at 163-173°

Hazard & Toxicity: LD₅₀ (mus, ivn) 139 mg/kg

Rare Chemicals Library: S39325-8

>>Derivative: 3,4,7,15,16-Penta-Ac

Melting Point: Mp 257-258 dec.°

Optical Rotation: $[\alpha]_D^{24} -88.8$ (Py)

>>Derivative: *O*³-(*R*)-2-Methylbutanoyl

Synonym(s): Protoveratridine

CAS Registry Number: 465-78-1

Molecular Formula: $C_{32}H_{51}NO_9$

Molecular Weight: 593.756

Accurate Mass: 593.356384

Percentage Composition: C 64.73%; H 8.66%; N 2.36%; O 24.25%

Biological Source: Alkaloid from *Zygadenus venenosus*, *Veratrum album* and *Veratrum viride* (Liliaceae)

Melting Point: Mp 272-273°

Optical Rotation: $[\alpha]_D^{22} -9$ (c, 0.76 in Py)

>>Derivative: *O*¹⁵-(*R*)-2-Methylbutanoyl

Synonym(s): 2-Methylbutyrylgermine

CAS Registry Number: 42138-61-4

Molecular Formula: $C_{32}H_{51}NO_9$

Molecular Weight: 593.756

Accurate Mass: 593.356384

Percentage Composition: C 64.73%; H 8.66%; N 2.36%; O 24.25%

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

Melting Point: Mp 224-226°

Optical Rotation: $[\alpha]_D -21.5$ (Py)