



Percentage Composition: C 70.72%; H 7.99%; N 3.17%; O 18.12%

Biological Source: Alkaloid from the rhizomes of *Aconitum yesoense* var. *macroyesoense* (Ranunculaceae)

Physical Description: Amorph.

Optical Rotation: $[\alpha]_D^{25} +9.3$ (c, 0.43 in EtOH)

>> **Derivative:** 12-Epimer

Synonym(s): 12-Epidehydronapelline

CAS Registry Number: 116197-11-6

Molecular Formula: $C_{22}H_{31}NO_3$

Molecular Weight: 357.492

Accurate Mass: 357.230394

Percentage Composition: C 73.92%; H 8.74%; N 3.92%; O 13.43%

Biological Source: Alkaloid from above-ground parts of *Aconitum napellus* ssp. *castellanum* (Ranunculaceae) and from *Aconitum liangshanium*

Physical Description: Resin or amorph. solid

Optical Rotation: $[\alpha]_D^{25} +45$ (c, 0.17 in EtOH). $[\alpha]_D^{23} +56.8$ (c, 1.02 in $CHCl_3$)

>> **Derivative:** 12-Epimer, O^{12} -Ac

Synonym(s): 12-Epiacetyldehydronapelline

CAS Registry Number: 116171-99-4

Molecular Formula: $C_{24}H_{33}NO_4$

Molecular Weight: 399.529

Accurate Mass: 399.240959

Percentage Composition: C 72.15%; H 8.32%; N 3.51%; O 16.02%

Biological Source: Alkaloid from above-ground parts of *Aconitum napellus* ssp. *castellanum* (Ranunculaceae)

Physical Description: Resin

Optical Rotation: $[\alpha]_D^{25} +25$ (c, 0.22 in EtOH)

>> **Derivative:** 12-Epimer, O^{15} -Ac

Synonym(s): 12-Epidehydrolucidusculine

CAS Registry Number: 137121-73-4

Molecular Formula: $C_{24}H_{33}NO_4$

Molecular Weight: 399.529

Accurate Mass: 399.240959

Percentage Composition: C 72.15%; H 8.32%; N 3.51%; O 16.02%

Biological Source: Alkaloid from *Aconitum liangshanium* (Ranunculaceae)

Physical Description: Amorph.

Optical Rotation: $[\alpha]_D^{23} -9.6$ (c, 1.2 in $CHCl_3$)

>> **Derivative:** 12-Ketone

Synonym(s): Songoramine

CAS Registry Number: 23179-78-4

Molecular Formula: $C_{22}H_{29}NO_3$

Molecular Weight: 355.476

Accurate Mass: 355.214744

Percentage Composition: C 74.33%; H 8.22%; N 3.94%; O 13.50%

Biological Source: Alkaloid from *Aconitum karakolicum* and roots of *Aconitum songoricum* (Ranunculaceae)

Physical Description: Cryst. (Me_2CO)

Melting Point: Mp 211-212°

>> **Derivative:** 12-Ketone: hydrochloride

Melting Point: Mp 290 dec.°