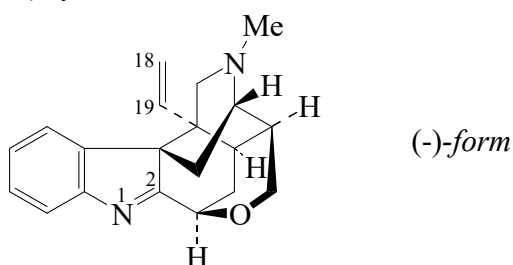




**>>Entry Name: Koumine**

**Synonym(s):** 1,2,18,19-Tetrahydro-3,17-epoxy-7,20(2*H*,19*H*)-cyclovobasan, 9Cl



**Related CAS Registry Numbers(s):** 83705-29-7 119241-69-9

**Molecular Formula:** C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O

**Molecular Weight:** 306.407

**Accurate Mass:** 306.173213

**Percentage Composition:** C 78.40%; H 7.24%; N 9.14%; O 5.22%

**>>Variant: (+)-form**

**Molecular Formula:** C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O

**Molecular Weight:** 306.407

**Accurate Mass:** 306.173213

**Percentage Composition:** C 78.40%; H 7.24%; N 9.14%; O 5.22%

**Source/Synthesis:** Synthetic

**Optical Rotation:** [α]<sub>D</sub><sup>24</sup> +218 (c, 0.200 in EtOH)

**>>Variant: (–)-form**

**CAS Registry Number:** 1358-76-5

**Molecular Formula:** C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O

**Molecular Weight:** 306.407

**Accurate Mass:** 306.173213

**Percentage Composition:** C 78.40%; H 7.24%; N 9.14%; O 5.22%

**Biological Source:** Main alkaloid from *Gelsemium elegans* (Loganiaceae)

**Physical Description:** Cryst. (Me<sub>2</sub>CO)

**Melting Point:** Mp 172°

**Optical Rotation:** [α]<sub>D</sub> –272 (EtOH)

**UV:** [neutral] λ<sub>max</sub> 220 (log ε 4.32); 262 (log ε 3.84) (EtOH)

**>>Derivative: N<sup>b</sup>-Oxide(R–)**

**Molecular Formula:** C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>2</sub>

**Molecular Weight:** 322.406

**Accurate Mass:** 322.168128

**Percentage Composition:** C 74.51%; H 6.88%; N 8.69%; O 9.93%

**Source/Synthesis:** Semisynthetic by oxidation of Koumine

**Physical Description:** Cryst. + 2H<sub>2</sub>O (Me<sub>2</sub>CO)

**Melting Point:** Mp 214-216°

**Optical Rotation:** [α]<sub>D</sub><sup>19</sup> –157 (c, 0.14 in MeOH)

**>>Derivative: N<sup>b</sup>-Oxide(S–)**

**Synonym(s):** Koumine *N*-oxide

**CAS Registry Number:** 113900-75-7

**Molecular Formula:** C<sub>20</sub>H<sub>22</sub>N<sub>2</sub>O<sub>2</sub>

**Molecular Weight:** 322.406

**Accurate Mass:** 322.168128

**Percentage Composition:** C 74.51%; H 6.88%; N 8.69%; O 9.93%

**Biological Source:** Alkaloid from the leaves of *Gelsemium elegans* (Loganiaceae)

**Physical Description:** Cryst. + &lqu; H<sub>2</sub>O (Me<sub>2</sub>CO)

**Melting Point:** Mp 111-113°

**Optical Rotation:** [α]<sub>D</sub><sup>19</sup> –237 (c, 0.14 in MeOH)

**>>Derivative: 1,2-Dihydro**

**Synonym(s):** Dihydrokoumine