

# (-) -Securinine

Catalog No: tcsc0018584



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 25mg



## Specifications

**CAS No:**

5610-40-2

**Formula:**

$C_{13}H_{15}NO_2$

**Pathway:**

Neuronal Signaling;Membrane Transporter/Ion Channel

**Target:**

GABA Receptor;GABA Receptor

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Observed Molecular Weight:**

217.26

## Product Description

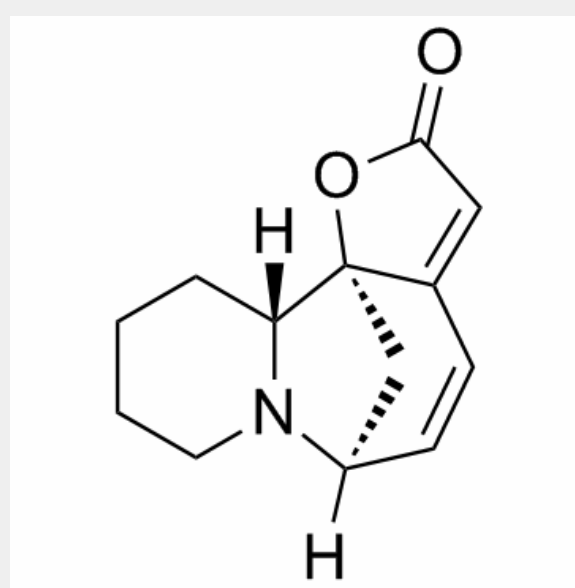
(-)-Securinine is plant-derived alkaloid and also a **GABA<sub>A</sub> receptor** antagonist.

IC50 & Target: GABA<sub>A</sub> receptor<sup>[1]</sup>

**In Vitro:**

(-)-Securinine is a major plant-derived alkaloid and also a GABA<sub>A</sub> receptor antagonist. (-)-Securinine is significantly potent on HeLa cells growth inhibition with IC<sub>50</sub> values of 7.02±0.52 µg/mL (32.3 µM). (-)-Securinine induces apoptosis in a dose-dependent manner in the tested cells, increases the percentage of ROS positive cells and depolarized cells as well as stimulates the activity of ERK1/2, caspase-9 and -3/7. (-)-Securinine also induces cell cycle arrest in S phase. Real-time PCR analysis shows high expression of tumor necrosis factor receptor superfamily (TNFRSF) genes in the cells stimulated with (-)-Securinine<sup>[1]</sup>.

***In Vivo:*** In this tumor model, tumor growth is significantly impaired with (-)-Securinine treatment indicating that (-)-Securinine has potential as an Acute Myeloid Leukemia (AML) therapeutic. (-)-Securinine treated mice (n=5 mice, bilateral tumors), exhibit an average of more than 75% smaller tumors than vehicle treated mice at the end of the study period<sup>[2]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!