

Product Name:	Matrine
Product Number:	M075
CAS Number:	519-02-8
Molecular Formula:	$C_{15}H_{24}N_2O$
Molecular Weight:	248.36
Description:	<p>Matrine is an alkaloid extracted from the Chinese <i>Sophora</i> herb plants. As a natural product it has a relatively low toxicity. Matrine has demonstrated antiviral and anti-inflammatory bioactivity. Additionally, it has been shown to induce apoptosis in many human cancer cell lines.</p> <p>TOKU-E also offers a few bioactive alkaloids similar to matrine: <u>Oxymatrine (O031)</u> and <u>Oxysophocarpine (O034)</u>.</p> <p>Matrine is soluble in water, benzene, chloroform, ether, carbon disulfide.</p>
Mechanism of Action:	Key mechanisms proposed for the antitumor effects of matrine include regulating the expression of proliferation- and apoptosis-related genes or proteins, such as eIF4E, E2F-1, Fas, FasL, Bcl-2, Bax, and caspases.
References:	<p>Zhang, S., Zhang, Y., Zhuang, Y., Wang, J., Ye, J., Zhang, S., . . . Han, Y. (2012). Matrine Induces Apoptosis in Human Acute Myeloid Leukemia Cells via the Mitochondrial Pathway and Akt Inactivation. <i>PLoS ONE</i>, 7(10). doi:10.1371/journal.pone.0046853</p>