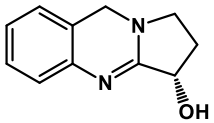
Vasicine

Name of the Phytochemical	**Vasicine**
Chemical Structure	
Botanical Source	Adhatoda vasica
CAS Number	6159-56-4
Functional Activity	• Both the alkaloids Vasicine and Vasicinone in combination (1:1) showed pronounced bronchodilatory activity in vivo and in vitro. • Vasicine acetate showed antimycobacterial activity. • *In vivo*, vasicine (0.2 mg/kg) reduces lipid peroxidation, increases activity of the antioxidases superoxide dismutase (SOD), catalase (CAT), and glutathione (GSH) peroxidase (Gpx), and increases levels of GSH in lung in a rat model of toxin-induced asthma • A potential natural cholinesterase inhibitor, exhibited promising anticholinesterase activity in preclinical models and has been in development for treatment of Alzheimer's disease.
Key References	**1.** Antimycobacterial activity of two natural alkaloids, vasicine acetate and 2-acetyl benzyl amine, isolated from Indian shrub Adhatoda vasica, **Journal of Biosciences. 2010, 35, 565–570** **2.** Potent uterine activity of alkaloid vasicine, **Indian Journal of Medical Research, 1977, 66, 865–871** **3.** In Vitro and In Vivo Metabolism and Inhibitory Activities of Vasicine, a Potent Acetyl cholinesterase and Butyrylcholinesterase Inhibitor, Plos One, 2015, April 7 **4.** Vasicine and structurally related quinazolines, **Medicinal Chemistry Research, 2012, 22, 1–15**