Isorhynchophylline (IRN), an alkaloid isolated from Uncaria rhynchophylla, possesses the effects of lowered blood pressure, vasodilatation and protection against ischemia-induced neuronal damage. IC50 value:

**Target:**
- **In vitro:** Isorhynchophylline concentration-dependently inhibited the platelet-derived growth factor (PDGF)-BB-induced proliferation of PASMCs. Fluorescence-activated cell-sorting analysis showed that isorhynchophylline caused G0/G1 phase cell cycle arrest [2]. Isorhynchophylline can significantly attenuate the cardiomyocyte hypertrophy induced by AngII [3].
- **In vivo:** Isorhynchophylline significantly improved spatial learning and memory function in the D-gal-treated mice. Isorhynchophylline significantly increased the level of glutathione (GSH) and the activities of superoxide dismutase (SOD) and catalase (CAT), while decreased the level of malondialdehyde (MDA) in the brain tissues of the
D-gal-treated mice [1]. Isorhynchophylline prevented monocrotaline induced pulmonary arterial hypertension in rats, as assessed by right ventricular (RV) pressure, the weight ratio of RV to (left ventricular+septum) and RV hypertrophy. Isorhynchophylline significantly attenuated the percentage of fully muscularized small arterioles, the medial wall thickness, and the expression of smooth muscle α-actin (α-SMA) and proliferating cell nuclear antigen (PCNA) [2].

REFERENCES

