Rhynchophylline is an oxyindole alkaloid found in Uncaria sinensis. Rhynchophylline displays anti-arrhythmic, antithrombotic, antioxidative, and neuroprotective characteristics. This compound inhibits platelet aggregation, decreases channel activation and peak tail currents of voltage-gated hERG K+ channels on myocytes, and decreases Ca2+ currents of L-type Ca2+ channels. Additionally, rhynchophylline noncompetitively inhibits NMDA receptors and downregulates expression of the NR2B NMDA receptor subunit. As a result of these mechanisms, rhynchophylline protects against glutamate-induced neuronal death and acts as a vasodilator. This compound also decreases presence of superoxide anions and inhibits NF-κB activation through actions on IkB kinase, preventing epileptic seizures in vivo.

References


Caution: This product is intended for laboratory and research use only. It is not for human or drug use.