Sinomenine is an alkaloid found in *Sinomenium* that exhibits analgesic, neuroprotective, anti-inflammatory, immunomodulatory, anti-allergic, and anticancer chemotherapeutic activities. In vivo, sinomenine improves mechanical withdrawal threshold and cold pain sensitivity. Sinomenine also decreases OVA-induced allergies in animal models, lowering levels of IgE, IL-4, and IFN-γ. Additionally, sinomenine decreases production of COX-2 and other pro-inflammatory cytokines in vitro. In animal models of cerebral ischemia, sinomenine inhibits acid-sensing ion currents and L-type voltage-gated Ca²⁺ currents, improving recovery and decreasing infarction volume. This compound also inhibits tumor growth and cell proliferation in models of breast cancer.

References


