Dextromethorphan exhibits anti-tussive, hallucinogenic, neuromodulatory, neuroprotective, anticonvulsant/antiepileptic, and anti-osteoporotic activities. Dextromethorphan acts as a full antagonist at serotonin transporters (SERTs), norepinephrine transporters (NETs), α3β4, α4β2, and α7 nicotinic acetylcholine receptors (nAChRs), and NADPH oxidase; it also acts as a weak antagonist at NMDA receptors. Additionally, dextromethorphan acts as a full agonist at σ1/2 receptors and as a weak agonist at μ/κ/δ opioid receptors. Dextromethorphan is commonly used in over-the-counter cough medicines. In animal models of Parkinson’s disease, dextromethorphan inhibits endotoxin-induced dopaminergic neurodegeneration. In electroshock assays, this compound inhibits the development of seizures. Dextromethorphan also inhibits RANKL-induced osteoclastogenesis and prevents bone loss in vivo.

References


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