BIOLOGICAL ACTIVITY:

Ro 41-1049 hydrochloride is a selective, reversible, orally-active MAO-A inhibitor.

Target: MAO

in vivo: Ro 41-1049 is an inhibitor of the enzyme monoamine oxidase type A (MAO-A) to rats and monitored extracellular catecholamine levels in the corpus striatum before and after the intraperitoneal (IP) administration of a bolus of L-dopa. Acute administration of Ro 41-1049 (1-50 mg/kg IP) produced a dose-dependent decrease in basal levels of the dopamine metabolites 3,4-dihydroxyphenylacetic acid (DOPAC) and homovanillic acid (HVA) and an increase in basal levels of dopamine. In rats treated with Ro 41-1049 (20 mg/kg IP), L-dopa administration (100 mg/kg IP) produced a greater increase in striatal levels of dopamine than it did in controls, while DOPAC and HVA formation was attenuated. We conclude that inhibition of central MAO-A activity promotes synaptic accumulation of dopamine following administration of pharmacological doses of L-dopa.

References:


Caution: Product has not been fully validated for medical applications. For research use only.