Open Peer Review on Qeios

Selegiline Hydrochloride

National Cancer Institute

Source

National Cancer Institute. Selegiline Hydrochloride. NCI Thesaurus. Code C47714.

The hydrochloride salt form of selegiline, a levorotatory acetylenic derivative of phenethylamine with antiparkinsonian effect. As a selective monoamine oxidase (MAO) inhibitor, selegiline has the greatest affinity for type B MAO, found mainly in the brain. Selegiline is converted by MAO B to an active moiety, which binds irreversibly at the active site of the enzyme's cofactor FAD (flavin adenine dinucleotide) molecule. This prevents the oxidative deamination of catecholamines and serotonin by MAO B, and leads to an increase in these neurotransmitters' activities resulting in improved motor function. In addition, this agent may inhibit re-uptake of dopamine by the neuron and prolong dopamine activity.