Riluzole is clinically used to treat symptoms of amyotrophic lateral sclerosis (ALS). Riluzole inhibits Na+, K+, and Ca2+ currents and may display anticonvulsant activity, inhibiting rhythmic motor disorders. Riluzole also exhibits antinociceptive, anxiolytic, and anti-parasitic activities. Riluzole reverses cutaneous hypersensitivity in animal models of thermal pain, increasing response latency. This compound also improves performance of animals in the elevated plus maze, light/dark avoidance test, and open field test. Additionally, riluzole activates transient receptor potential canonical 5 (TRPC5) channels. Riluzole inhibits pteridine reductase 1 (PTR1) in parasites, increasing oxidative stress and resulting in death of Leishmania parasites. In vitro, riluzole increases glucose transport and upregulates translocation of glucose transporters to the plasma membrane. Riluzole may be a non-competitive inhibitor of kainate receptors and NMDA receptors.

References


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