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 antiparasitic 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.