

# Riluzole

**Catalog No: tcsc2156**



## Available Sizes

**Size:** 50mg

**Size:** 100mg

**Size:** 500mg

**Size:** 1g



## Specifications

**CAS No:**

1744-22-5

**Formula:**

$C_8H_5F_3N_2OS$

**Pathway:**

Neuronal Signaling;Membrane Transporter/Ion Channel;Membrane Transporter/Ion Channel

**Target:**

GABA Receptor;GABA Receptor;Sodium Channel

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Alternative Names:**

PK 26124

**Observed Molecular Weight:**

234.2

## Product Description

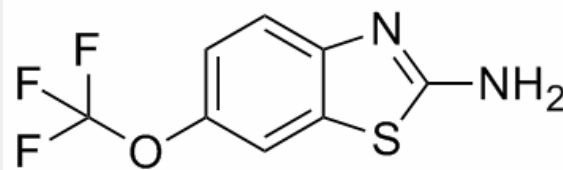
Riluzole is an anticonvulsant drug and belongs to the family of use-dependent **Na<sup>+</sup> channel** blocker which can also inhibit **GABA** uptake with an **IC<sub>50</sub>** of 43  $\mu$ M.

IC50 & Target: Sodium channel<sup>[1]</sup>

IC50: 43  $\mu$ M (GABA receptor)<sup>[1]</sup>

**In Vitro:** Riluzole is an anticonvulsant drug and belongs to the family of use-dependent Na<sup>+</sup> channel blocker which can also inhibit GABA uptake with an IC<sub>50</sub> of 43  $\mu$ M. At 20  $\mu$ M, Riluzole inhibits peak autaptic IPSCs only slightly but prolongs IPSCs reliably. It is also found that Riluzole causes a strong, concentration-dependent, readily reversible enhancement of responses to 2  $\mu$ M GABA. At higher concentrations of Riluzole, especially 300  $\mu$ M, GABA currents exhibit apparent desensitization during prolonged co-exposure to 2  $\mu$ M GABA and Riluzole. The EC<sub>50</sub> of Riluzole potentiation of GABA responses is about 60  $\mu$ M<sup>[1]</sup>.

**In Vivo:** In normal naïve rats, systemic injection of Riluzole (8 mg/kg, i.p.; n=6 rats) decreases the duration of ultrasonic but not audible vocalizations evoked by noxious stimulation of the knee joint compare to vehicle tested in the same rats (P[2]).



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!