

Riluzole hydrochloride

Catalog No: tcsc0020981



Available Sizes

Size: 50mg

Size: 100mg

Size: 500mg



Specifications

CAS No:

850608-87-6

Formula:

$C_8H_6ClF_3N_2OS$

Pathway:

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

Target:

GABA Receptor;GABA Receptor;Sodium Channel

Purity / Grade:

>98%

Solubility:

H2O : 131 mg/mL (484.00 mM; Need ultrasonic and warming)

Alternative Names:

PK 26124 hydrochloride

Observed Molecular Weight:

270.66

Product Description

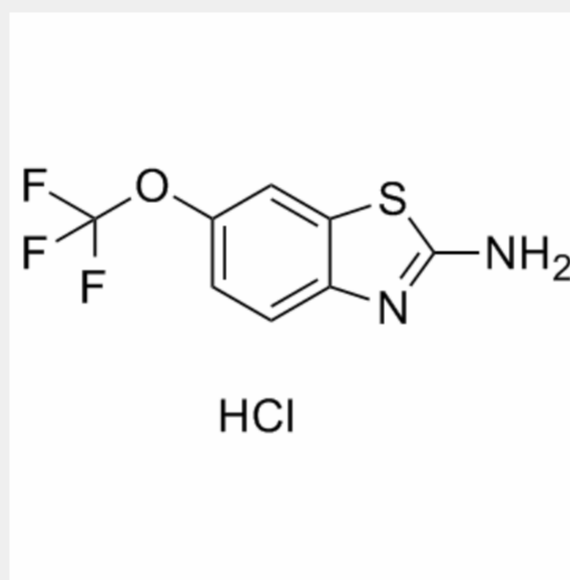
Riluzole hydrochloride is an anticonvulsant drug and belongs to the family of use-dependent **Na⁺ channel** blocker which can also inhibit **GABA** uptake with an **IC₅₀** of 43 μ M.

IC50 & Target: Sodium channel^[1]

IC50: 43 μ M (GABA receptor)^[1]

In Vitro: Riluzole hydrochloride is an anticonvulsant drug and belongs to the family of use-dependent Na⁺ channel blocker which can also inhibit GABA uptake with an IC₅₀ of 43 μ M. At 20 μ M, Riluzole hydrochloride inhibits peak autaptic IPSCs only slightly but prolongs IPSCs reliably. It is also found that Riluzole hydrochloride causes a strong, concentration-dependent, readily reversible enhancement of responses to 2 μ M GABA. At higher concentrations of Riluzole hydrochloride, especially 300 μ M, GABA currents exhibit apparent desensitization during prolonged co-exposure to 2 μ M GABA and Riluzole hydrochloride. The EC₅₀ of Riluzole hydrochloride potentiation of GABA responses is about 60 μ M^[1].

In Vivo: In normal naïve rats, systemic injection of Riluzole hydrochloride (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]).



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