Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

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

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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 **IC_{50}** of 43 μM.

IC50 & Target: Sodium channel[1]

IC50: 43 μM (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 IC_{50} of 43 μM. At 20 μM, 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 μM GABA. At higher concentrations of Riluzole hydrochloride, especially 300 μM, GABA currents exhibit apparent desensitization during prolonged co-exposure to 2 μM GABA and Riluzole hydrochloride. The EC_{50} of Riluzole hydrochloride potentiation of GABA responses is about 60 μM[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].