

Product Name: Riluzole hydrochloride

Catalog No.: 0768

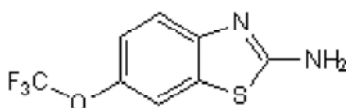
Batch No.: 17

CAS Number: 850608-87-6

IUPAC Name: 2-Amino-6-trifluoromethoxybenzothiazole hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₈H₅F₃N₂OS.HCl
Batch Molecular Weight: 270.66
Physical Appearance: White solid
Solubility: DMSO to 100 mM
 water to 10 mM with gentle warming
Storage: Store at RT
Batch Molecular Structure: .HCl



2. ANALYTICAL DATA

TLC: R_f = 0.65 (Chloroform:Methanol [9:1] + NH₄OH 0.1%)
HPLC: Shows >99.7% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	35.5	2.23	10.35
Found	35.51	2.59	10.33

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Product Name: Riluzole hydrochloride

Catalog No.: 0768

Batch No.: 17

CAS Number: 850608-87-6

IUPAC Name: 2-Amino-6-trifluoromethoxybenzothiazole hydrochloride

Description:

Inhibits glutamate release from presynaptic terminals and increases Na⁺-dependent glutamate uptake in rat cortical synaptosomes. Blocks voltage-dependent Na⁺ channels and inhibits GABA uptake by striatal synaptosomes. Also activates TRPC5 channels. Psychotropic agent with anticonvulsant, hypnotic, anxiolytic, anti-ischemic, anesthetic and neuroprotective properties.

Physical and Chemical Properties:

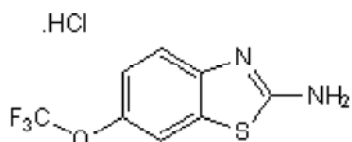
Batch Molecular Formula: C₈H₅F₃N₂OS.HCl

Batch Molecular Weight: 270.66

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

DMSO to 100 mM
water to 10 mM with gentle warming

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Richter *et al* (2014) Riluzole activates TRPC5 channels independently of PLC activity. *Br.J.Pharmacol.* **171** 158. PMID: 24117252.

Fumagalli *et al* (2008) Riluzole enhances the activity of glutamate transporters GLAST, GLT1 and EAAC1. *Eur.J.Pharmacol.* **578** 171. PMID: 18036519.

Song *et al* (1997) Differential action of Riluzole on tetrodotoxin-sensitive and tetrodotoxin-resistant sodium channels. *J.Pharmacol.Exp.Ther.* **282** 707. PMID: 9262334.

Taylor and Meldrum (1995) Na⁺ channels as targets for neuroprotective drugs. *TIPS* **16** 309. PMID: 7482996.

Umeniya and Berger (1995) Inhibition by Riluzole of glycinergic postsynaptic currents in rat hypoglossal motoneurons. *Br.J.Pharmacol.* **116** 3227. PMID: 8719800.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com
techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors
Tel:+1 612 379 2956