

# **Certificate of Analysis**

Print Date: Nov 15th 2021

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Product Name: Riluzole hydrochloride Catalog No.: 0768 Batch No.: 18

CAS Number: 850608-87-6

IUPAC Name: 2-Amino-6-trifluoromethoxybenzothiazole hydrochloride

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>8</sub>H<sub>5</sub>F<sub>3</sub>N<sub>2</sub>OS.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:

2. ANALYTICAL DATA

**HPLC:** Shows 98.8% purity

<sup>1</sup>H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 35.5 2.23 10.35 Found 35.69 2.19 10.32

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



## **Product Information**

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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: C<sub>8</sub>H<sub>5</sub>F<sub>3</sub>N<sub>2</sub>OS.HCl

Batch Molecular Weight: 270.66 Physical Appearance: White solid

**Minimum Purity:** ≥98%

#### **Batch Molecular Structure:**

.HCI

F<sub>3</sub>C

S

NH<sub>2</sub>

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).

Catalog No.: 0768

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.

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