Product overview

Name: Riluzole hydrochloride
Cat No: HB0548
Short description: Na\(^+\) channel blocker / glutamate inhibitor
Biological description: Na\(^+\) channel blocker. Increases glutamate uptake and inhibits glutamate release. Also inhibits GABA uptake. Non-competitive NMDA receptor and Protein kinase C (PKC) inhibitor. Shows neuroprotective, anxiolytic, anticonvulsant and anesthetic actions. Shows actions against motorneuron disease.

Alternative names: PK 26124
Biological action: Blocker
Purity: >98%

Images

Properties

Chemical name: 2-Amino-6-trifluoromethoxybenzothiazole hydrochloride
Molecular Weight: 270.66

Chemical structure:

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\begin{center}
\begin{tikzpicture}
  \node at (0,0) (center) {\Huge HCl};
  \node at (-2.5,-1.5) (N) {\Huge N};
  \node at (-2.5,0) (O) {\Huge O};
  \node at (-2.5,1.5) (F) {\Huge F};
  \draw (0,0) -- (N); \draw (0,0) -- (O); \draw (0,0) -- (F);
\end{tikzpicture}
\end{center}
```

Molecular Formula: C\(_8\)H\(_5\)F\(_3\)N\(_2\)OS.HCl
CAS Number: 850608-87-6
PubChem identifier: 6419992
SMILES: C1=CC2=C(C=C1OC(F)(F)F)SC(=N2)N.Cl
Source: Synthetic
InChi: InChI=1S/C8H5F3N2OS.ClH/c9-8(10,11)14-4-1-2-5-6(3-4)15-7(12)13-5/h11-3H,(H2,12,13);1H
InChiKey: QEAOELUQRYJJS-UHFFFAOYSA-N
MDL number: MFCD00210213
Appearance: White solid
Storing and Using Your Product

Storage instructions: Room temperature
Solubility overview: Soluble in DMSO (100mM, gentle warming) and in water (10mM, gentle warming)
Important: This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

References for Riluzole hydrochloride

Riluzole improves outcome following ischemia-reperfusion injury to the spinal cord by preventing delayed paraplegia.
PubMedID: 24508749

Riluzole enhances the activity of glutamate transporters GLAST, GLT1 and EAAC1.
PubMedID: 18036519

Riluzole blocks persistent Na+ and Ca2+ currents and modulates release of glutamate via presynaptic NMDA receptors on neonatal rat hypoglossal motoneurons in vitro.
PubMedID: 18445055

Riluzole produces distinct anxiolytic-like effects in rats without the adverse effects associated with benzodiazepines.
PubMedID: 22377384