DATASHEET
Riluzole hydrochloride

Product overview

<table>
<thead>
<tr>
<th>Name</th>
<th>Riluzole hydrochloride</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cat No</td>
<td>HB0548</td>
</tr>
<tr>
<td>Alternative names</td>
<td>PK 26124</td>
</tr>
<tr>
<td>Biological action</td>
<td>Blocker</td>
</tr>
<tr>
<td>Purity</td>
<td>&gt;98%</td>
</tr>
<tr>
<td>Description</td>
<td>Na⁺ channel blocker / glutamate inhibitor. TREK-1 K2P channel activator. Water soluble.</td>
</tr>
</tbody>
</table>

Images

Biological Data

Biological description
Na⁺ channel blocker. Increases glutamate uptake and inhibits glutamate release and also inhibits GABA uptake. Non-competitive NMDA receptor and Protein kinase C (PKC) inhibitor. Also a TREK-1 K2P channel activator. Shows neuroprotective, anxiolytic, anticonvulsant and anesthetic actions. Shows actions against motorneuron disease.

Solubility & Handling

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.

Chemical Data

Chemical name
2-Amino-6-trifluoromethoxybenzothiazole hydrochloride
Molecular Weight
270.66
Chemical structure
\[
\text{\begin{center}
\begin{tikzpicture}
\draw (0,0) -- (0,2) -- (2,2) -- (2,0) -- cycle;
\draw (0.5,1) ellipse (0.5 and 0.5);
\draw (1.5,1) ellipse (0.5 and 0.5);
\draw (1,0) -- (1,1);
\draw (1,1) -- (1.5,1);
\draw (1.5,1) -- (1.5,2);
\draw (1.5,2) -- (2,2);
\draw (2,2) -- (2,1);
\draw (2,1) -- (1.5,1);
\draw (1,0) -- (1,1);
\node at (1,1) {\text{NH}_2};
\node at (1,0) {\text{O}};
\node at (2,2) {\text{S}};
\node at (1,1) {\text{F}_3 \text{C}};
\node at (2,1) {\text{N}};
\node at (1,2) {\text{F}_3 \text{C}};
\end{tikzpicture}
\end{center}}
\]
Molecular Formula
C₈H₅F₃N₂OS.HCl
CAS Number
850608-87-6
### References

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

Wu Y *et al* (2014) Neuroscience 265

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