Sabeluzole

Cat. No.: HY-105022

CAS No.: 104383-17-7

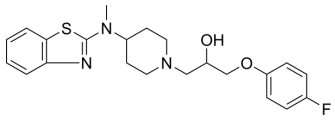
Molecular Formula: $C_{22}H_{26}FN_3O_2S$

Molecular Weight: 415.52

Target: Tau Protein

Pathway: Neuronal Signaling

Storage: Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Sabeluzole (R 58735), a benzothiazol derivative, has antiischemic, antiepileptic, and cognitive-enhancing properties. Sabeluzole protects rat hippocampal neurons against NMDA- and glutamate-induced neurotoxicity via preventing tau expression. Sabeluzole enhances memory in rats, and prevents the amnesic effect of Chlordiazepoxide. Sabeluzole can be used fro research of Alzheimer's disease[1][2].

In Vitro

Sabeluzole (50 nM, 100 nM; 20 min before cell injury) exhibits protection in glutamate (50 μM)-mediated excitotoxicity in primary culture of cerebellar granule cell[1].
Sabeluzole (50 nM; 7 d) inhibits tau protein level increase induced by glutamate[1].
Sabeluzole (50 nM; 4 d) shows neuroprotective effects in human neuroblastoma cell line SH-SY5Y[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Sabeluzole (5 mg/kg, 25 mg/kg; sc; twice dose with 72 h interval) shows positive and memory enhancing properties in habituation amnesia male rats induced with 20 mg/kg Chlordiazepoxide[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Adult albino male rats (270-330 g) induced by Chlordiazepoxide[2]
Dosage:	5 mg/kg, 25 mg/kg
Administration:	SC; 0.5 ml/kg; twice dose with 72 h interval; 1 h before 20 mg/kg Chlordiazepoxide
Result:	Showed the positive effects on several learning and memory tasks in rats. Did not influence locomotor and rearing activity of animals during the acquisition session.

REFERENCES

[1]. Hlinák Z,et al. Sabeluzole improves social recognition and antagonizes chlordiazepoxide's effect on habituation in the rat. Psychopharmacology (Berl). 1991;104(4):505-9.

[2]. Uberti D, et al. Priming of cultured neurons with sabeluzole results in long-lasting inhibition of neurotoxin-induced tau expression and cell death. Synapse. 1997 Jun;26(2):95-103.

Caution: Product has not been fully validated for medical applications. For research use only.

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