Product Data Sheet

Azumolene

Cat. No.:HY-113920ACAS No.:64748-79-4Molecular Formula: $C_{13}H_9BrN_4O_3$ Molecular Weight:349.14

Target: Calcium Channel

Pathway: Membrane Transporter/Ion Channel; Neuronal Signaling

Storage: Powder -20°C 3 years

4°C 2 years

In solvent -80°C 2 years

-20°C 1 year

SOLVENT & SOLUBILITY

In Vitro

DMSO: 13.89 mg/mL (39.78 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.8642 mL	14.3209 mL	28.6418 mL
	5 mM	0.5728 mL	2.8642 mL	5.7284 mL
	10 mM	0.2864 mL	1.4321 mL	2.8642 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 1.39 mg/mL (3.98 mM); Suspended solution; Need ultrasonic
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE- β -CD in saline) Solubility: \geq 1.39 mg/mL (3.98 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	Azumolene (EU4093 free base), a Dantrolene analog, is a muscle relaxant. Azumolene is a ryanodine receptor (RyR) modulator and inhibits the calcium-release through ryanodine receptor. Azumolene can be used for malignant hyperthermia research ^{[1][2]} .
In Vitro	Pretreatment with 20 μ M Azumolene for 1-2 min inhibits SOCE activated by subsequent addition of caffeine and ryanodine to promote RyR-dependent sarcoplasmic reticulum Ca ²⁺ store depletion in mouse myotubes and adult muscle fibers ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	The effect of Azumolene (EU4093) on the twitch of the intact rat soleus preparation is nearly maximal at a dose of 20 mg/kg. This dose of Azumolene reduces the amplitude of the twitch to 31.9% of the control value. The contraction of intrafusal

$muscle\ as\ measured\ by\ the\ response\ of\ spindle\ afferent\ discharge\ is\ also\ reduced\ by\ Azumolene^{[1]}.$

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. G C Leslie, et al. The effect of EU4093 (azumolene sodium) on the contraction of intrafusal muscle in the soleus muscle of the anaesthetized rat. Br J Pharmacol. 1989 Aug;97(4):1151-6.

[2]. Viktor Yarotskyy, et al. Accelerated activation of SOCE current in myotubes from two mouse models of anesthetic- and heat-induced sudden death. PLoS One. 2013 Oct 15;8(10):e77633.

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

Tel: 609-228-6898 Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

Page 2 of 2 www.MedChemExpress.com