Edasalonexent

Cat. No.: HY-17630

CAS No.: 1204317-86-1

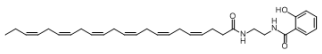
Molecular Formula: $C_{31}H_{42}N_2O_3$

Molecular Weight: 490.68

Target: NF-κB

Pathway: NF-κB

Storage: -20°C, protect from light
* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 120 mg/mL (244.56 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.0380 mL	10.1899 mL	20.3799 mL
	5 mM	0.4076 mL	2.0380 mL	4.0760 mL
	10 mM	0.2038 mL	1.0190 mL	2.0380 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: ≥ 3 mg/mL (6.11 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Edasalonexent (CAT-1004) is an orally bioavailable NF-κB inhibitor.

IC_{50} & Target

NF-κB[1]

In Vitro

Edasalonexent is an orally administered small molecule in which salicylic acid and docosahexaenoic acid (DHA) are covalently conjugated through an ethylenediamine linker and that is designed to synergistically leverage the ability of both of these compounds to inhibit NF-κB. Edasalonexent significantly inhibits NF-κB p65-dependent inflammatory responses as well as downstream proinflammatory genes modulated by p65 in the golden retriever duchenne muscular dystrophy (DMD) model[2].

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

In Vivo

The treatment of mdx mice with Edasalonexent for 20 weeks results in reduced susceptibility of the extensor digitorum longus muscle to eccentric contraction-induced injury[1].

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

PROTOCOL

Animal Administration [1]	Mice[1] Male ***mdx*** or WT mice are used. Drug treatment protocols entail feeding individually housed mice a specialty control chow or chow containing either CAT-1041 or Edasalonexent (0.75% w/w) ad libitum starting at 4 weeks of age. Average drug consumption typically ranges between 0.75 and 1 mg/g body weight per day. The 24-hour plasma exposure at this dosage is 450ng hr/mL for Edasalonexent[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Hammers DW, et al. Disease-modifying effects of orally bioavailable NF-κB inhibitors in dystrophin-deficient muscle. JCI Insight. 2016 Dec 22;1(21):e90341.

[2]. Donovan JM, et al. A Novel NF-κB Inhibitor, Edasalonexent (CAT-1004), in Development as a Disease-Modifying Treatment for Patients With Duchenne Muscular Dystrophy: Phase 1 Safety, Pharmacokinetics, and Pharmacodynamics in Adult Subjects. J Clin Pharmacol. 2017 May;57(5):627-639.

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