Veledimex

Cat. No.: HY-16785

CAS No.: 1093130-72-3

Molecular Formula: $C_{27}H_{38}N_2O_3$

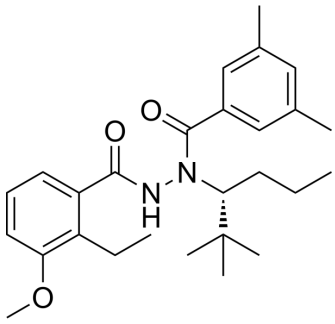
Molecular Weight: 438.6

Target: Interleukin Related

Pathway: Immunology/Inflammation

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 : 25 mg/mL (57.00 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.2800 mL	11.3999 mL	22.7998 mL
5 mM	0.4560 mL	2.2800 mL	4.5600 mL
10 mM	0.2280 mL	1.1400 mL	2.2800 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (5.70 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Veledimex (INXN-1001), a synthetic analog of the insect molting hormone ecdysone, is an orally active activator ligand for a proprietary gene therapy promoter system. Veledimex can be used to activate certain genes using the ecdysone receptor (EcR)-based inducible gene regulation system, the RheoSwitch Therapeutic System (RTS). Veledimex can cross blood-brain barrier (BBB) in both orthotopic GL-261 mice and cynomolgus monkeys[1][2].

IC_{50} & Target

IL-12 | IL-1

In Vivo

Veledimex (INXN-1001) generally has moderate to low oral bioavailability after a single oral administration in mice and monkeys (-56% in mice and up to 17.4% in cynomolgus monkeys) with mostly low plasma clearance (1399 and 1170 mL/h per kilogram in mice and monkeys, respectively), high volume of distribution (20271 and 9180 mL/h per kilogram in mice and monkeys, respectively), and long terminal half-lives (-10 hours in mice and -30 hours in monkeys) after intravenous administration[1]. Ad-RTS-mIL-12 + Veledimex have demonstrated a dose-related increase in tumor IL-12 mRNA and IL-12

protein expression. Discontinuation of Veledimex resulted in a return to baseline IL-12 mRNA and protein expression in numerous syngeneic mouse tumor models. Veledimex crosses the blood-brain-barrier in both naive and orthotopic GL-261 mice with increased brain tissue level of -6 fold observed in tumor bearing vs. normal mice. Ad-RTS-mIL-12 + veledimex demonstrate a dose-related increase in survival without significant adverse events[2].

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

REFERENCES

[1]. Barrett JA, et al. Regulated intratumoral expression of IL-12 using a RheoSwitch Therapeutic System® (RTS®) gene switch as gene therapy for the treatment of glioma. Cancer Gene Ther. 2018;25(5-6):106-116.

[2]. Chiocca EA, et al. Regulatable interleukin-12 gene therapy in patients with recurrent high-grade glioma: Results of a phase 1 trial. Sci Transl Med. 2019;11(505):eaaw5680.

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