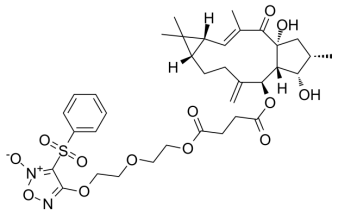
Anti-inflammatory agent 38

Cat. No.:	HY-146971
CAS No.:	3032633-42-1
Molecular Formula:	$C_{36}H_{46}N_2O_{13}S$
Molecular Weight:	746.82
Target:	NO Synthase; Reactive Oxygen Species
Pathway:	Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (133.90 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.3390 mL	6.6951 mL	13.3901 mL
	5 mM	0.2678 mL	1.3390 mL	2.6780 mL
	10 mM	0.1339 mL	0.6695 mL	1.3390 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: ≥ 5 mg/mL (6.70 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Anti-inflammatory agent 38 (compound 23d) is a potent Nrf2/HO-1 pathway inhibitor, with an IC_{50} value of 0.38 μM for NO. Anti-inflammatory agent 38 can significantly reduce the level of ROS in cells. Anti-inflammatory agent 38 can be used for researching anti-inflammatory[1].

IC_{50} & Target

IC_{50}: 0.38 μM (NO)[1]

In Vitro

Anti-inflammatory agent 38 (compound 23d) (0.25, 0.5, 1 and 2 μM; 3 hours) can reduce ROS production in RAW264.7 cells stimulated with LPS (0.5 μg/mL LPS stimulates for 12 hours)[1].
Anti-inflammatory agent 38 (0.25, 0.5, 1 and 2 μM; 3 hours) significantly increases the expression of Nrf2 and HO-1 in LPS-stimulated RAW264.7 cells in a dose-dependent manner, and promoting LPS-induced Nrf2 nuclear translocation[1]
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis

Cell Line:	RAW264.7 (0.5 μg/mL LPS stimulates for 12 hours)[1]
Concentration:	0.25, 0.5, 1 and 2 μM
Incubation Time:	3 hours
Result:	Significantly increased the expression of Nrf2 and HO-1 in a dose-dependent manner.

REFERENCES

[1]. Wang W, et al. Synthesis of lathyrane diterpenoid nitrogen-containing heterocyclic derivatives and evaluation of their anti-inflammatory activities. Bioorg Med Chem.

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