Proteins

Product Data Sheet

(E/Z)-Locostatin

Cat. No.: HY-W013411 CAS No.: 133812-16-5 Molecular Formula: C₁₄H₁₅NO₃ Molecular Weight: 245.27 Others Target: Pathway: Others

Storage: Powder -20°C 3 years

2 years

-80°C In solvent 6 months

> -20°C 1 month

SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (407.71 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	4.0771 mL	20.3857 mL	40.7714 mL
	5 mM	0.8154 mL	4.0771 mL	8.1543 mL
	10 mM	0.4077 mL	2.0386 mL	4.0771 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: ≥ 2.5 mg/mL (10.19 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (10.19 mM); Suspended solution; Need ultrasonic
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (10.19 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

(E/Z)-Locostatin ((E/Z)-UIC-1005) is a racemic of Locostatin. Locostatin (UIC-1005) is a potent RKIP inhibitor. Locostatin binds Raf kinase inhibitor RKIP protein and disrupts the interaction of RKIP with Raf-1 kinase and G protein-coupled receptor kinase 2. Locostatin inhibits cell proliferation and migration. Locostatin aggravates thioacetamide (HY-Y0698)induced acute liver failure in mice [1][2][3].

IC₅₀ & Target

RKIP^[3]

REFERENCES

- [1]. Beshir AB, et al. Locostatin Disrupts Association of Raf Kinase Inhibitor Protein With Binding Proteins by Modifying a Conserved Histidine Residue in the Ligand-Binding Pocket. For Immunopathol Dis Therap. 2011;2(1):47-58.
- [2]. Mc Henry KT, et al. A non-antibacterial oxazolidinone derivative that inhibits epithelial cell sheet migration. Chembiochem. 2002 Nov 4;3(11):1105-11.
- [3]. Lin X, et al. Inhibition of RKIP aggravates thioacetamide-induced acute liver failure in mice. Exp Ther Med. 2018 Oct;16(4):2992-2998.

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