ISX-1

Cat. No.: HY-113790

CAS No.: 909207-35-8

Molecular Formula: $C_{14}H_{14}N_4O_2S$

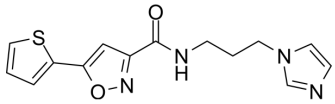
Molecular Weight: 302.35

Target: Others

Pathway: Others

Storage: 4°C, protect from light

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



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (165.37 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.3074 mL	16.5371 mL	33.0742 mL
	5 mM	0.6615 mL	3.3074 mL	6.6149 mL
	10 mM	0.3307 mL	1.6537 mL	3.3074 mL

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

BIOLOGICAL ACTIVITY

Description

ISX-1 is an isoxazole. ISX-1 has anti-adipogenic and pro-osteogenic activities. ISX-1 can be used for the research of osteopenia and osteoporosis[1].

IC_{50} & Target

IC50: 1.9 μM (lipid droplet formation); EC50: 1.2 μM (induce ALP)[1]

In Vitro

ISX-1 dose-dependently inhibits the accumulation of intracellular lipid droplets and stimulated ALP activity[1].

ISX-1 can form lipid droplet with an IC_{50} value of 1.9 μM and also can induce ALP with an EC_{50} value of 1.2 μM[1].

ISX-1 (0, 1.3, 6.5 and 33 μM; 3 days) inhibited the mRNA induction of PPARγ and FABP4 genes under the adipogenic differentiation of hBMSCs[1].

ISX-1 (0, 1.3, 6.5 and 33 μM) promotes TCF/LEF-mediated gene transcription[1].

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

RT-PCR[1]

Cell Line:	Human bone marrow mesenchymal stem cells (hBMSCs)
Concentration:	0, 1.3, 6.5 and 33 μM

Incubation Time:	3 days
Result:	Inhibited the mRNA induction of PPARγ and FABP4 genes under the adipogenic differentiation of hBMSCs and showed no effect on C/EBPα expression.

Western Blot Analysis[1]

Cell Line:	HEK 293 cells
Concentration:	6.5 and 33 μM
Incubation Time:	6.5 and 33 μM
Result:	Increased both the amount of activated and total β-catenin.

REFERENCES

[1]. Nawa, Katsuhiko et al. Discovering small molecules that inhibit adipogenesis and promote osteoblastogenesis: unique screening and Oncostatin M-like activity. Differentiation. 2013 Jul-Sep;86(1-2):65-74.

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