

Data Sheet

 Product Name:
 SKL2001

 Cat. No.:
 CS-0020797

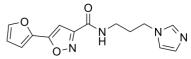
 CAS No.:
 909089-13-0

 Molecular Formula:
 C14H14N4O3

Molecular Weight: 286.29

Target:Wnt; β-cateninPathway:Stem Cell/Wnt

Solubility: DMSO : \geq 96.66 mg/mL (337.63 mM)



BIOLOGICAL ACTIVITY:

SKL2001 is an agonist of the Wnt/β-catenin pathway, with anti-cancer activity. SKL2001 stabilizes intracellular β-catenin via disruption of the Axin/β-catenin interaction^[1]. IC50 & Target: Wnt/β-catenin^[1] In Vitro: SKL2001 is an agonist of the Wnt/β-catenin pathway, and also upregulates the expression of Axin2, a downstream target of the Wnt/β-catenin pathway, but shows no effect on NF-κB, p53 reporter activity and GSK-3β activity. SKL2001 causes osteoblast differentiation (20 and 40 μ M) and suppresses preadipocyte differentiation (5, 10, and 30 μ M) via the activation of the Wnt/β-catenin pathway. SKL2001 (5, 10, and 30 μ M) stabilizes intracellular β-catenin in 3T3-L1 cells^[1]. SKL2001 (40 μ M) significantly inhibits the proliferation of HCT116 spheroids independently of cytotoxicity and the inhibition is reversible; SKL2001 cuases cell cycle arrest in HCT116 spheroids. SKL2001 (40 μ M) enhances round-shape spheroid formation and E-cadherin expression^[2].

PROTOCOL (Extracted from published papers and Only for reference)

Cell Assay: SKL2001 is dissolved in DMSO^[1].^[1]ST2 cells are cultured on glass chamber slides and then treated with DMSO or SKL2001 for 15 h. After treatment, the cells are washed with PBS, fixed with 4% formaldehyde, permeabilized in 0.3% Triton X-100, and blocked in 4% bovine serum albumin for 1 h. The cells are stained with anti- β -catenin antibody and then analyzed by confocal microscopy using a microscope^[1].

References:

[1]. Gwak J, et al. Small molecule-based disruption of the Axin/ β -catenin protein complex regulates mesenchymal stem cell differentiation. ell Res. 2012 Jan;22(1):237-47.

[2]. Ohashi W, et al. SKL2001 suppresses colon cancer spheroid growth through regulation of the E-cadherin/ β -Catenin complex. Biochem Biophys Res Commun. 2017 Nov 25;493(3):1342-1348.

CAIndexNames:

3-Isoxazolecarboxamide, 5-(2-furanyl)-N-[3-(1H-imidazol-1-yl)propyl]-

SMILES:

O=C(C1=NOC(C2=CC=CO2)=C1)NCCCN3C=CN=C3

Page 1 of 2 www.ChemScene.com

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 732-484-9848 Fax: 888-484-5008 E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

Page 2 of 2 www.ChemScene.com