FIDAS-3

Cat. No.: HY-136145

CAS No.: 1266684-01-8

Molecular Formula: $C_{16}H_{15}F_2N$

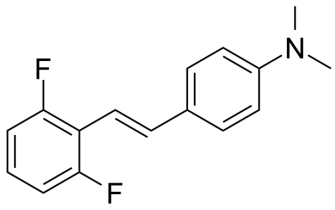
Molecular Weight: 259.29

Target: Wnt

Pathway: Stem Cell/Wnt

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 (385.67 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	3.8567 mL	19.2834 mL	38.5669 mL
5 mM	0.7713 mL	3.8567 mL	7.7134 mL
10 mM	0.3857 mL	1.9283 mL	3.8567 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 (9.64 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (9.64 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

FIDAS-3 is a stilbene derivative and is a potent Wnt inhibitor with an IC_{50} of 4.9 μM for methionine S-adenosyltransferase 2A (MAT2A). FIDAS-3 effectively competes against S-adenosylmethionine (SAM) for MAT2A binding. FIDAS-3 has anticancer activities[1][2].

IC_{50} & Target

IC50: 4.9 μM (Methionine S-adenosyltransferase 2A (MAT2A))[1]

In Vitro

FIDAS-3 (3 μM; 7 days; LS174T cells) treatment significantly inhibits the proliferation of LS174T cells[1].
FIDAS-3 (3-10 μM) treatment inhibits the expression of c-Myc and cyclinD1 in LS174T CRC cells. And FIDAS-3 induces the expression of cell cycle inhibitor, $p21^{WAF1/CIP1}$[1].
FIDAS-3 (10 μM; 36 h) treatment reduces the levels of both S-adenosylmethionine (SAM) and S-adenosylhomocysteine (SAH) in LS174T cells[1].

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

Cell Viability Assay[1]

Cell Line:	LS174T colorectal cancer (CRC) cells
Concentration:	3 μM
Incubation Time:	7 days
Result:	Significantly inhibited the proliferation of LS174T cells.

In Vivo

FIDAS-3 (20 mg/kg; intraperitoneal injection; daily; for one months; C57BL/6J athymic nude mice) treatment significantly inhibits the growth of xenograft tumors[2].

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

Animal Model:	C57BL/6J athymic nude mice (6-8 week) injected with LS174 cells[2]
Dosage:	20 mg/kg
Administration:	Intraperitoneal injection; daily; for one months
Result:	Significantly inhibited the growth of xenograft tumors.

REFERENCES

[1]. Zhang W, et al. Fluorinated N,N-dialkylaminostilbenes repress colon cancer by targeting methionine S-adenosyltransferase 2A. ACS Chem Biol. 2013 Apr 19;8(4):796-803.

[2]. Zhang W, et al. Fluorinated N,N-dialkylaminostilbenes for Wnt pathway inhibition and colon cancer repression. J Med Chem. 2011 Mar 10;54(5):1288-97.

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