SSE15206

Cat. No.: HY-111425

CAS No.: 1370046-40-4

Molecular Formula: $C_{19}H_{21}N_3O_3S$

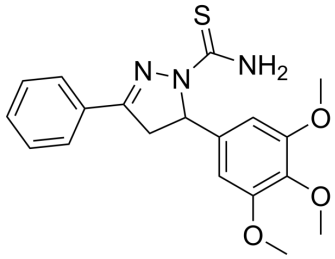
Molecular Weight: 371.45

Target: Microtubule/Tubulin; Apoptosis

Pathway: Cell Cycle/DNA Damage; Cytoskeleton; Apoptosis

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	2 years
	-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 150 mg/mL (403.82 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.6922 mL	13.4608 mL	26.9215 mL
	5 mM	0.5384 mL	2.6922 mL	5.3843 mL
	10 mM	0.2692 mL	1.3461 mL	2.6922 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 (6.73 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 2.5 mg/mL (6.73 mM); Suspended solution; Need ultrasonic
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (6.73 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

SSE15206 is a microtubule polymerization inhibitor (GI_{50} = 197 nM in HCT116 cells) that overcomes multidrug resistance. Causes aberrant mitosis resulting in G2/M arrest due to incomplete spindle formation in cancer cells[1].

IC_{50} & Target

GI50: 197 nM (microtubule)[1].

In Vitro

SSE15206 induces apoptosis in cells irrespective of MDR-1 overexpression cell lines (KB-V1, A2780-Pac-Res), highly resistant to paclitaxel cells (HCT116-Pac-Res) and parental cells at the concentration of 5 × and 10 × GI_{50} values. To conclude,

SSE15206 is able to overcome resistance to chemotherapeutic drugs such as paclitaxel in different cancer cell lines[1].

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

Western Blot Analysis[1]

Cell Line:	Drug-resistant cell lines (KB-V1, A2780-Pac-Res, HCT116-Pac-Res) and parental cells.
Concentration:	5 × and 10 × GI_{50} values (GI_{50}=197 nM in HCT-116 cells).
Incubation Time:	24 hours.
Result:	Induced apoptosis in cells irrespective of MDR-1 overexpression and HCT116-Pac-Res and parental cells.

REFERENCES

[1]. Manzoor S, et al. Identification and characterization of SSE15206, a microtubule depolymerizing agent that overcomes multidrug resistance. Sci Rep. 2018 Feb 19;8(1):3305.

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