



Ispinesib

Catalog No: tcsc0891



Available Sizes

Size: 10mg

Size: 50mg



Specifications

CAS No:

336113-53-2

Formula:

 $\mathrm{C_{30}H_{33}CIN_4O_2}$

Pathway:

Cytoskeleton; Cell Cycle/DNA Damage

Target:

Kinesin; Kinesin

Purity / Grade:

>98%

Solubility:

DMSO : ≥ 125 mg/mL (241.75 mM); H2O :

Alternative Names:

SB-715992

Observed Molecular Weight:

517.06

Product Description

Ispinesib is a specific inhibitor of **KSP**, with a $K_{i app}$ of 1.7 nM.



IC50 & Target: Ki app: 1.7 nM (KSP)^[1]

In Vitro: Ispinesib is a potent, highly specific inhibitor of KSP, with a $K_{i \text{ app}}$ of 1.7 nM^[1]. Ispinesib (150 nM) inhibits BT-474 and MDA-MB-468 cell lines, with GI_{50} s of 45 and 19 nM, respectively^[2]. Ispinesib (SB715992, 15 and 30 nM) suppresses the proliferation of PC-3 prostate cancer cell by 48.65% and 52.16%, and induces apoptosis of prostate cancer cell by 1094.88% and 1516.70%, respectively. Ispinesib up regulates genes responsible for apoptosis and cell cycle arrest, and down regulates genes responsible for cell proliferation and survival. The anti-proliferation and pro-apoptotic activities of Ispinesib can be enhanced by genistein^[3].

In Vivo: Ispinesib (SCID, 8 mg/kg; nude, 10 mg/kg, q4d \times 3) reduces tumor volume in mice bearing tumor xenografts of ER-positive (MCF7), HER2-positive (KPL4, HCC1954, and BT-474), and triple-negative (MDA-MB-468) breast cancer cells via i.p. one dose every 4 days repeated three times^[2].

All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!