

# Ispinesib

**Catalog No: tcsc0891**



## Available Sizes

**Size:** 10mg

**Size:** 50mg



## Specifications

**CAS No:**

336113-53-2

**Formula:**

$C_{30}H_{33}ClN_4O_2$

**Pathway:**

Cytoskeleton;Cell Cycle/DNA Damage

**Target:**

Kinesin;Kinesin

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 125$  mg/mL (241.75 mM); H<sub>2</sub>O :

**Alternative Names:**

SB-715992

**Observed Molecular Weight:**

517.06

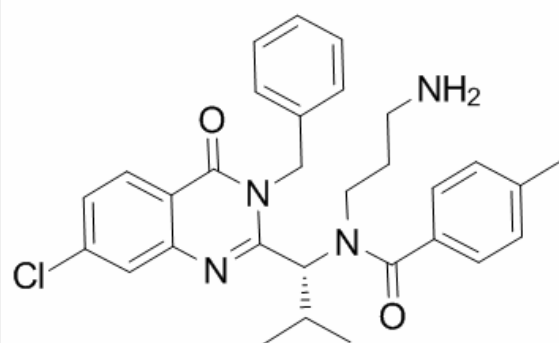
## Product Description

Ispinesib is a specific inhibitor of **KSP**, with a **K<sub>i app</sub>** of 1.7 nM.

IC50 & Target: Ki app: 1.7 nM (KSP)<sup>[1]</sup>

**In Vitro:** Ispinesib is a potent, highly specific inhibitor of KSP, with a  $K_{i \text{ app}}$  of 1.7 nM<sup>[1]</sup>. Ispinesib (150 nM) inhibits BT-474 and MDA-MB-468 cell lines, with  $GI_{50}$ s of 45 and 19 nM, respectively<sup>[2]</sup>. 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<sup>[3]</sup>.

**In Vivo:** Ispinesib (SCID, 8 mg/kg; nude, 10 mg/kg, q4d × 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<sup>[2]</sup>.



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