

# Filanesib

**Catalog No: tcsc0867**



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

**CAS No:**

885060-09-3

**Formula:**

$C_{20}H_{22}F_2N_4O_2S$

**Pathway:**

Cytoskeleton;Cell Cycle/DNA Damage

**Target:**

Kinesin;Kinesin

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Alternative Names:**

ARRY-520

**Observed Molecular Weight:**

420.48

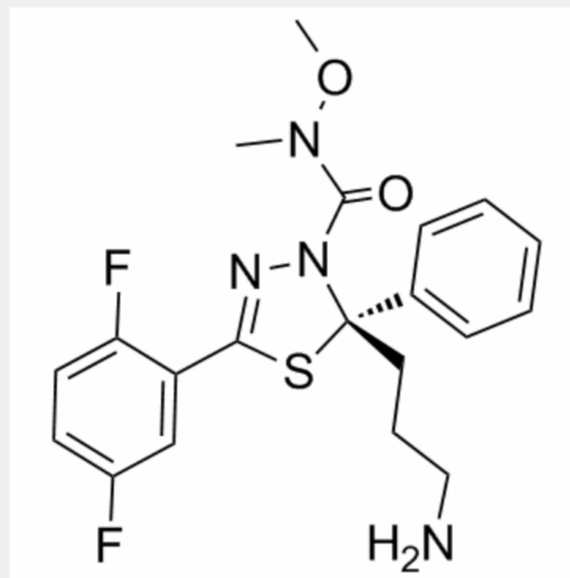
## Product Description

Filanesib (ARRY-520) is a synthetic kinesin spindle protein (**KSP**) inhibitor with **IC<sub>50</sub>** of 6 nM.

IC50 & Target: IC50: 6 nM (KSP)<sup>[1]</sup>

**In Vitro:** Filanesib (ARRY-520) retains activity in multidrug-resistant cell lines. The EC<sub>50</sub>s of Filanesib (ARRY-520) for inhibition of proliferation of HCT-15, NCI/ADR-RES and K562/ADR cells are 3.7, 14 and 4.2 nM respectively. Filanesib (ARRY-520) (10 nM) blocks a majority of cells in mitosis with the monopolar spindle structure typical of KSP inhibition<sup>[1]</sup>. Filanesib (ARRY-520) (10 nM) induces mitotic arrest as judged by both increased phosphorylation of histone H3 (pHH3) and accumulation of cyclin B1 in four cells<sup>[2]</sup>. Filanesib (ARRY-520) and Paclitaxel exhibit the same cytotoxic effect on Type I and II cells. The GI<sub>50</sub> at 48 h for Type II EOC cells is 0.0015 μM for ARRY-520. For Type I EOC cells, the GI<sub>50</sub> at 48 h is > 3 μM for ARRY-520<sup>[3]</sup>. Filanesib (ARRY-520) (1 nM) induces significant G2M cell cycle block in OCI-AML3 cells at 24 hours<sup>[4]</sup>.

**In Vivo:** Filanesib (ARRY-520) (10, 15, 20, 30 mg/kg, i.p.) is active in UISO-BCA-1 xenograft, and also superior to paclitaxel in mice bearing subcutaneous HT-29, HCT-116, MDA-MB-231 and A2780 xenografts. ARRY-520 is superior to docetaxel in the androgen receptor-negative prostate cancer xenograft model PC-3, and is also superior to docetaxel in the DU145 prostate xenograft model<sup>[1]</sup>. RPMI 8226 tumor xenografts are particularly sensitive to low doses of ARRY-520 (12.5 mg/kg, i.p.)<sup>[2]</sup>. ARRY-520 significantly inhibits tumor growth in HL60 and MV4-11 xenografts of SCID mice at concentrations of 27 mg/kg and 20 mg/kg, respectively<sup>[4]</sup>.



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