

# PP121

**Catalog No: tcsc0087**



## Available Sizes

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

**CAS No:**

1092788-83-4

**Formula:**

$C_{17}H_{17}N_7$

**Pathway:**

Protein Tyrosine Kinase/RTK;Protein Tyrosine Kinase/RTK;Protein Tyrosine Kinase/RTK;PI3K/Akt/mTOR

**Target:**

Src;VEGFR;PDGFR;mTOR

**Purity / Grade:**

>98%

**Solubility:**

DMSO : 20 mg/mL (62.63 mM; Need ultrasonic)

**Observed Molecular Weight:**

319.36

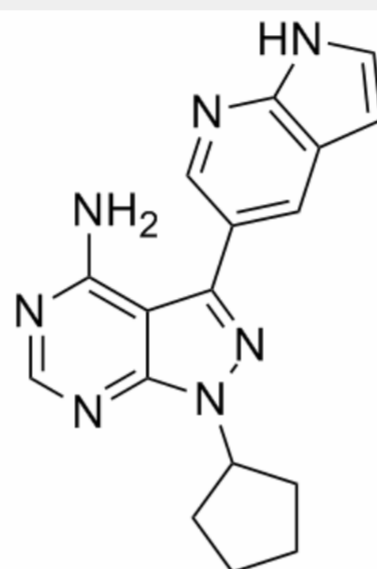
## Product Description

PP121 is a multi-targeted kinase inhibitor with **IC<sub>50</sub>s** of 10, 60, 12, 14, 2 nM for **mTOR, DNK-PK, VEGFR2, Src, PDGFR**, respectively.

IC50 & Target: IC50: 10 nM (mTOR), 60 nM (DNK-PK), 12 nM (VEGFR2), 14 nM (Src), 2 nM (PDGFR)<sup>[1]</sup>

**In Vitro:** PP121 blocks the PI3K pathway by direct inhibition of PI3K/mTOR in two glioblastoma cell lines, U87 and LN229. PP121 potently inhibits the proliferation of a diverse panel of tumor cell lines containing mutations in the PI3-K pathway components PIK3CA, PTEN, or RAS. PP121 induces a G<sub>0</sub>G<sub>1</sub> arrest in most tumor cells. PP121 directly inhibits Src in cells and reverses its biochemical and morphological effects. PP121 potently inhibits the Ret kinase domain *in vitro* (IC<sub>50</sub>)<sup>[1]</sup>.

**In Vivo:** Oral administration of PP121 remarkably inhibits Eca-109 xenograft growth. Mice body weights are not significantly affected by PP121 or the vehicle treatment. PP121 oral administration dramatically inhibits activations of Akt-mTOR and NFκB in xenograft tumors. p-Akt Ser 473 and p-IKKa/b are both inhibited by PP121 administration<sup>[2]</sup>.



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