

# TAK-593

Catalog No: tcsc2403



## Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg



## Specifications

CAS No:

1005780-62-0

Formula:

$C_{23}H_{23}N_7O_3$

Pathway:

Protein Tyrosine Kinase/RTK;Protein Tyrosine Kinase/RTK

Target:

VEGFR;PDGFR

Purity / Grade:

>98%

Solubility:

DMSO :  $\geq$  48.5 mg/mL (108.87 mM)

Observed Molecular Weight:

445.47

## Product Description

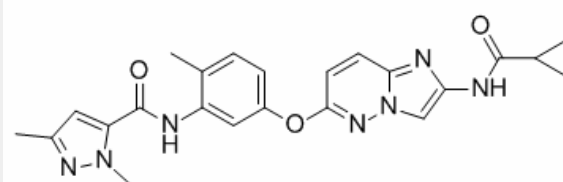
TAK-593 is a potent **VEGFR** and **PDGFR** family inhibitor with **IC<sub>50</sub>**s of 3.2, 0.95, 1.1, 4.3 and 13 nM for VEGFR1, VEGFR2, VEGFR3,

PDGFR $\alpha$  and PDGFR $\beta$ , respectively.

IC<sub>50</sub> & Target: IC<sub>50</sub>: 3.2 nM (VEGFR1), 0.95 nM (VEGFR2), 1.1 nM (VEGFR3), 4.3 nM (PDGFR $\alpha$ ), 13 nM (PDGFR $\beta$ )<sup>[1]</sup>

**In Vitro:** TAK-593 inhibits growth of HUVEC with an IC<sub>50</sub> of 0.30 nM. It shows potent inhibitory activity against VEGFR (VEGFR1-3: IC<sub>50</sub>=3.2, 0.95, 1.1 nM) and PDGFR (PDGFR $\alpha$ ,  $\beta$ : IC<sub>50</sub>=4.3, 13 nM) families. Against other kinases, the IC<sub>50</sub> values of TAK-593 are above 100 nM, except for Fms (IC<sub>50</sub>=10 nM) and Ret (IC<sub>50</sub>=18 nM) kinases<sup>[1]</sup>. TAK-593 potently inhibits VEGF- and PDGF-stimulated cellular phosphorylation and proliferation of human umbilical vein endothelial cells and human coronary artery smooth muscle cells. TAK-593 also potently inhibits VEGF-induced tube formation of endothelial cells co-cultured with fibroblasts<sup>[2]</sup>.

**In Vivo:** TAK-593 inhibits growth of HUVEC with an IC<sub>50</sub> of 0.30 nM. It shows potent inhibitory activity against VEGFR (VEGFR1-3: IC<sub>50</sub>=3.2, 0.95, 1.1 nM) and PDGFR (PDGFR $\alpha$ ,  $\beta$ : IC<sub>50</sub>=4.3, 13 nM) families. Against other kinases, the IC<sub>50</sub> values of TAK-593 are above 100 nM, except for Fms (IC<sub>50</sub>=10 nM) and Ret (IC<sub>50</sub>=18 nM) kinases<sup>[1]</sup>. TAK-593 potently inhibits VEGF- and PDGF-stimulated cellular phosphorylation and proliferation of human umbilical vein endothelial cells and human coronary artery smooth muscle cells. TAK-593 also potently inhibits VEGF-induced tube formation of endothelial cells co-cultured with fibroblasts<sup>[2]</sup>.



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