Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Vatalanib (dihydrochloride)

Catalog No: tcsc0149

Available Sizes

Size: 10mg

Size: 50mg

Size: 100mg

Size: 200mg

Size: 500mg

Size: 1g

Size: 2g

Specifications

CAS No:
212141-51-0

Formula:
$C_{20}H_{17}Cl_3N_4$

Pathway:
Protein Tyrosine Kinase/RTK

Target:
VEGFR

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 125 mg/mL (297.81 mM)

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Alternative Names:
PTK787 dihydrochloride;CGP-797870 dihydrochloride;ZK-222584 dihydrochloride

Observed Molecular Weight:
419.73

Product Description

Vatalanib dihydrochloride (PTK787 dihydrochloride) is an inhibitor of **VEGFR2/KDR** with **IC_{50}** of 37 nM.

IC50 & Target: IC50: 37 nM (VEGFR2/KDR)[1]

In Vitro: Vatalanib also inhibits Flk, c-Kit and PDGFRβ with IC_{50} of 270 nM, 730 nM and 580 nM, respectively. Vatalanib shows the anti-proliferation effect by inhibiting thymidine incorporation induced by VEGF in HUVECs with and IC_{50} of 7.1 nM, and dose-dependently suppresses VEGF-induced survival and migration of endothelial cells in the same dose range without cytotoxic or antiproliferative effect on cells that do not express VEGF receptors[1]. A recent study shows that Vatalanib significantly inhibits the growth of hepatocellular carcinoma cells and enhances the IFN/5-FU induced apoptosis by increasing proteins levels of Bax and reduced Bcl-xL and Bcl-2[2].

In Vivo: Vatalanib induces dose-dependent inhibition of the angiogenic response to VEGF and PDGF in both a growth factor implant model and a tumor cell-driven angiogenesis model after once-daily oral dosing (25-100 mg/kg). In the same dose range, Vatalanib also inhibits the growth and metastasesof several human carcinomas in nude mice without significant effect on circulating blood cells or bone marrow leukocytes[1].