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

Tivozanib

Catalog No: tcsc0103

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Size: 200mg

Specifications

CAS No:
475108-18-0

Formula:
$C_{22}H_{19}ClN_4O_5$

Pathway:
Protein Tyrosine Kinase/RTK

Target:
VEGFR

Purity / Grade:
>98%

Solubility:
DMSO : 25 mg/mL (54.96 mM; Need ultrasonic)

Alternative Names:
AV-951;KRN951

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Observed Molecular Weight:
454.86

Product Description

Tivozanib (AV-951; KRN951) is a highly potent and selective **VEGFR 1/2/3** inhibitor with **IC_{50}**s of 0.21, 0.16, and 0.24 nM in cell assay, respectively.

IC50 & Target: IC50: 0.21 nM (VEGFR 1), 0.16 nM (VEGFR 2), 0.24 nM (VEGFR 3)[1]

In Vitro: Tivozanib potently inhibits VEGF-induced VEGFR2 phosphorylation in endothelial cells (IC_{50}=0.16 nM). It also inhibits ligand-induced phosphorylation of PDGFRβ and c-Kit (IC_{50}=1.72 and 1.63 nM, respectively). Tivozanib blocks VEGF-dependent, but not VEGF-independent, activation of mitogenactivated protein kinases and proliferation of endothelial cells. It inhibits VEGF-mediated migration of human umbilical vein endothelial cells[1].

In Vivo: Following p.o. administration to athymic rats, Tivozanib decreases the microvessel density within tumor xenografts and attenuates VEGFR-2 phosphorylation levels in tumor endothelium. It also displays antitumor activity against a wide variety of human tumor xenografts, including lung, breast, colon, ovarian, pancreas, and prostate cancer[1].