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

Dovitinib (lactate)

Catalog No: tcsc6230

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Size: 200mg

Size: 500mg

Specifications

CAS No:
692737-80-7

Formula:
$C_{24}H_{27}FN_6O_4$

Pathway:
Protein Tyrosine Kinase/RTK

Target:
FGFR

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 30 mg/mL (62.17 mM)

Alternative Names:
CHIR-258 lactate;TKI-258 lactate

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Observed Molecular Weight:
482.51

Product Description

Dovitinib(CHIR-258; TKI258) lactate is a potent inhibitor of fibroblast growth factor receptor 3 (**FGFR3**) with an **IC_{50}** of 5 nM.

IC50 & Target: IC50: 5 nM (FGFR3)[1]

In Vitro: Dovitinib potently inhibits FGFR3 with an IC_{50} of 5 nM in *in vitro* kinase assays and selectively inhibits the growth of B9 cells and human myeloma cell lines expressing wild-type or activated mutant FGFR3. Addition of interleukin 6 (IL-6) or insulin growth factor 1 or coculture on stroma does not confer resistance to dovitinib. In primary myeloma cells dovitinib inhibits downstream extracellular signal-regulated kinase (ERK) 1/2 phosphorylation with an associated cytotoxic response[1]. Treatment of SK-HEP1 cells with dovitinib results in G2/M cell cycle arrest, inhibition of colony formation in soft agar and blockade of bFGF-induced cell migration. Dovitinib inhibits basal expression and FGF-induced phosphorylation of FGFR-1, FRS2-α and ERK1/2[2].

In Vivo: Dovitinib demonstrates significant antitumor and antimetastatic activities in HCC xenograft models. Dovitinib potently inhibits tumor growth of six HCC lines. Inhibition of angiogenesis correlates with inactivation of FGFR/PDGFR-β/VEGFR-2 signaling pathways. Dovitinib also causes dephosphorylation of retinoblastoma, upregulation of p-histone H2A-X and p27, and downregulation of p-cdk-2 and cyclin B1, which results in a reduction in cellular proliferation and the induction of tumor cell apoptosis[2].