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

Saracatinib

Catalog No: tcsc0101

Available Sizes

Size: 10mg

Size: 50mg

Size: 100mg

Size: 200mg

Size: 500mg

Size: 1g

Size: 2g

Specifications

CAS No:
379231-04-6

Formula:
$C_{27}H_{32}ClN_5O_5$

Pathway:
Protein Tyrosine Kinase/RTK;Autophagy

Target:
Src;Autophagy

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 32 mg/mL (59.04 mM)

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Alternative Names:
AZD0530

Observed Molecular Weight:
542.03

Product Description

Saracatinib is a potent **Src** inhibitor with **IC_{50}** of 2.7 nM, also inhibits **$EGFR^{L861Q}$** (**IC_{50}**=4nM), **$EGFR^{L858R}$** (**IC_{50}**= 5nM) and **v-Abl** (**IC_{50}**=30 nM).

IC50 & Target: IC50: 2.7 nM (Src), 30 nM (v-Abl), 66 nM (EGFR), 200 nM (c-Kit)[1]

In Vitro: Saracatinib (AZD0530), an orally available Src inhibitor, demonstrates potent antimigratory and anti-invasive effects in vitro, and inhibits metastasis in a murine model of bladder cancer. Antiproliferative activity of Saracatinib varies between cell lines (IC_{50} 0.2-10 μM). Saracatinib potently inhibits the proliferation of Src3T3 mouse fibroblasts and demonstrates variable antiproliferative activity in a range of human cancer cell lines containing endogenous Src. Sub micromolar growth inhibition of five of the human cancer cell lines tested with Saracatinib (tumor types: colon, prostate, lung, and leukemia) is observed with IC_{50} values of 0.2-0.7 μM. In 3-day MTS cell proliferation assays, Saracatinib inhibits proliferation of the Bcr-Abl-driven human leukemia cell line K562 with an IC_{50} of 0.22 μM. In the microdroplet migration assay, Saracatinib reduces the migration of human lung cancer A549 cells in a concentration-dependent manner (IC_{50} 0.14 μM)[1].

In Vivo: Saracatinib (AZD0530) treatment potently inhibits the proliferation of subcutaneously transplanted Src3T3 fibroblasts in mice and rats in a dose-dependent manner. In both models, significant inhibition of tumor growth is seen at doses ≥6 mg/kg/day (60% inhibition in mice and 98% inhibition in rats versus animals treated with vehicle) and, at the maximum doses investigated, complete tumor growth inhibition is observed (100% inhibition at 25 mg/kg/day in mice and 10 mg/kg/day in rats)[1].