Web: www.taiclone.com
Tel: +886-2-2735-9682
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Dasatinib (hydrochloride)

Catalog No: tcsc1585

Available Sizes

Size: 100mg

Size: 200mg

Size: 500mg

Size: 1g

Size: 2g

Size: 5g

Size: 10g

Specifications

CAS No:
854001-07-3

Formula:
$C_{22}H_{27}Cl_2N_7O_2S$

Pathway:
Protein Tyrosine Kinase/RTK;Protein Tyrosine Kinase/RTK;Autophagy

Target:
Src;Bcr-Abl;Autophagy

Purity / Grade:
>98%

Solubility:
DMSO : 15 mg/mL (28.60 mM; Need ultrasonic and warming); H2O : 10 mg/mL (19.07 mM; Need ultrasonic)

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Storage Instruction:
4°C, stored under nitrogen for long term.

Alternative Names:
BMS 354825 hydrochloride

Observed Molecular Weight:
524.47

Product Description

Dasatinib hydrochloride is a potent and dual **Abl^{WT}/Src** inhibitor **IC_{50}** of 0.6 nM/0.8 nM respectively; also inhibits **c-Kit^{WT}/c-Kit ^{D816V}** with **IC_{50}** of 79 nM/37 nM.

IC50 & Target: IC50: 0.6 nM/0.8 nM (Abl^{WT}/Src)[1]

IC50: 79 nM/37 nM (c-Kit^{WT}/c-Kit^{D816V})[2]

In Vitro: Dasatinib potently inhibits wild-type Abl kinase and all mutants except T315I over a narrow range (IC_{50}≤1.7 nM). Dasatinib (IC_{50}: 0.8 nM) displays 325-fold greater potency compared with Imatinib against cells expressing wild-type Bcr-Abl in Ba/F3 cells[1].

In Vivo: Daily treatment with Dasatinib (50 mg/kg) is initiated on day 10. Using this approach, a significant inhibition of BCPAP orthotopic tumor growth is observed 6 days after treatment (day 16, P=0.014), which is sustained through days 23 and 29 (P=0.0003), compared with vehicle-treated mice[3]. Metabolism studies of Dasatinib (50 mg/kg) in rat suggested that Dasatinib is the major circulating component, whereas multiple metabolites contributed to the remaining 40-60% of the sample radioactivity at 4 h post dose[4].