

# Dasatinib

**Catalog No: tcsc0100**



## Available Sizes

**Size:** 100mg

**Size:** 200mg

**Size:** 500mg

**Size:** 1g

**Size:** 2g

**Size:** 5g

**Size:** 10g



## Specifications

**CAS No:**

302962-49-8

**Formula:**

$C_{22}H_{26}ClN_7O_2S$

**Pathway:**

Protein Tyrosine Kinase/RTK;Protein Tyrosine Kinase/RTK;Autophagy

**Target:**

Src;Bcr-Abl;Autophagy

**Purity / Grade:**

>98%

**Solubility:**

DMSO : 35.35 mg/mL (72.44 mM; Need ultrasonic and warming)

#### Alternative Names:

BMS-354825

#### Observed Molecular Weight:

488.01

### Product Description

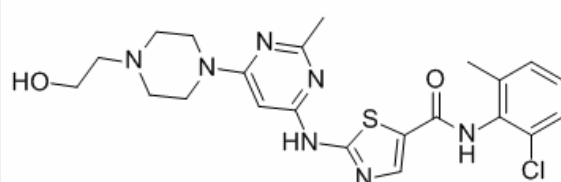
Dasatinib (BMS-354825) is a dual **Bcr-Abl** and **Src** family tyrosine kinase inhibitor with **IC<sub>50</sub>**s of 0.6, 0.8, 79 and 37 nM for Abl, Src, c-Kit and c-Kit<sup>D816V</sup>, respectively.

IC<sub>50</sub> & Target: IC<sub>50</sub>: 0.6 nM/0.8 nM (Abl<sup>WT</sup>/Src)<sup>[1]</sup>

IC<sub>50</sub>: 79 nM/37 nM (c-Kit<sup>WT</sup>/c-Kit<sup>D816V</sup>)<sup>[2]</sup>

**In Vitro:** Dasatinib potently inhibits wild-type Abl kinase and all mutants except T315I over a narrow range ( $IC_{50} \leq 1.7$  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<sup>[1]</sup>.

**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<sup>[3]</sup>. 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<sup>[4]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!