

## Dasatinib PRODUCT DATA SHEET

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Product Name: Dasatinib

Product Number: D074

**CAS Number:** 302962-49-8

**Molecular Formula:**  $C_{22}H_{26}CIN_7O_2S$ 

Molecular Weight: 488.01

**Appearance:** White to off-white powder

**Description:** Dasatinib is multitarget kinase inhibitor used in the treatment of leukemia.

Dasatinib's main targets are tyrosine kinase BCR/ABL, which works to provide the cancer cell with ATP at an uncontrolled rate causing rapid division, and the SRC family of kinases, which contribute to the malignant migration of

cancers.

Dasatinib is slightly soluble in ethanol and methanol, but insoluble in water.

This product is considered a dangerous good. Quantities above 1 g may be subject to additional shipping fees. Please contact us for specific questions.

**Mechanism of Action:** Dasatinib is able to bind to the kinase domain of both the active and inactive

forms of BCR/ABL for more effective inhibiting power.

**References:** Tokarski, J. S. (2006). The Structure of Dasatinib (BMS-354825) Bound to

Activated ABL Kinase Domain Elucidates Its Inhibitory Activity against Imatinib-Resistant ABL Mutants. *Cancer Research*, 66(11), 5790-5797.

doi:10.1158/0008-5472.can-05-4187

Buettner, R., Mesa, T., Vultur, A., Lee, F., & Jove, R. (2008). Inhibition of Src Family Kinases with Dasatinib Blocks Migration and Invasion of Human Melanoma Cells. *Molecular Cancer Research*, 6(11), 1766-1774.

doi:10.1158/1541-7786.mcr-08-0169

If you need any help, contact us: <a href="mailto:info@toku-e.com">info@toku-e.com</a>. Find more information on: <a href="mailto:www.toku-e.com">www.toku-e.com</a>.