

**DATA SHEET**

**Product Name:** Imatinib Mesylate

**Catalog #:** N-3020

**Alt:** CAS# 220127-57-1; 4-[(4-Methyl-1-piperazinyl)methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]-phenyl]benzamide methanesulfonate; STI-571

**Source:** Synthetic

**Molecular Mass:** 589.7 C<sub>29</sub>H<sub>31</sub>N<sub>7</sub>O · CH<sub>3</sub>SO<sub>3</sub>H

**Analysis:** 98% (TLC); NMR (Conforms)

**Supplied As:** White powder

**Resuspension:** May be dissolved in DMSO (50 mg/ml); or water (50 mg/ml)

**Storage:** Store desiccated as supplied at -20°C for up to 1 year. Store solutions at -20°C for up to 3 months.

**Description:** Tyrosine kinase inhibitor specific for bcr-abl (IC<sub>50</sub> = 38 nM)<sup>1</sup>, PDGF-R (IC<sub>50</sub> = 0.3 μM)<sup>1</sup> and c-kit (IC<sub>50</sub> = 0.1 μM)<sup>2</sup>. It is a clinically useful anti-cancer drug approved for the treatment of chronic myelogenous leukemia, gastrointestinal stromal tumors as well as several other cancers<sup>3</sup>. Lowers Aβ levels by indirect inhibition of γ-secretase without inhibiting γ-secretase processing of Notch<sup>4</sup>.

**References:**

1. Buchdunger, E., et al., (1996) Cancer Res., 56: 100
2. Heinrich, et al., (2000) Blood, 96: 925
3. Deininger, M., et al., (2003) Pharmacol. Rev., 55: 401
4. Netzer, W.J., et al., (2017) Proc. Natl. Acad. Sci. USA, 114: 1389

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