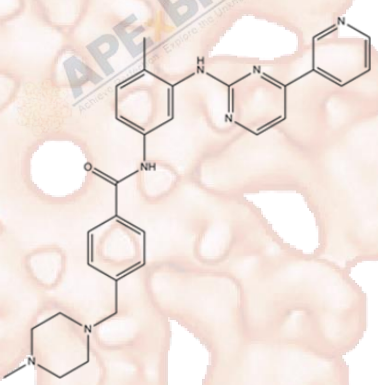
Product Data Sheet

Imatinib (STI571)



Cat. No.:	B2171
CAS No.:	152459-95-5
Formula:	C29H31N7O
M.Wt:	493.6
Synonyms:	
Target:	Tyrosine Kinase
Pathway:	c-Kit
Storage:	Store at -20°C

Solvent & Solubility

In Vitro

≥24.68 mg/mL in DMSO; insoluble in H2O; ≥2.48 mg/mL in EtOH with ultrasonic

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	2.0259 mL	10.1297 mL	20.2593 mL
5 mM	0.4052 mL	2.0259 mL	4.0519 mL
10 mM	0.2026 mL	1.0130 mL	2.0259 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary	Protein-tyrosine kinase inhibitor
IC_{50} & Target	0.1 μM (PDGF receptor), 0.1 μM (c-Kit), 0.025 μM (Abl)

In Vitro

Cell Viability Assay

Cell Line:	Swiss 3T3 cells, MO7e cells
Preparation method:	The solubility of this compound in DMSO is >24.7mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	0-10 μM, 90 min, 37°C

	Applications:	Pretreatment of Swiss 3T3 cells with STI571 caused a dose-dependent inhibition of PDGF-AA-stimulated PDGF receptor phosphorylation with an IC50 value of ～0.1 μM. Treatment of MO7e cells with SCF in the presence of STI571 dose-dependently inhibited SCF-stimulated tyrosine phosphorylation with an IC50 value of ～0.1 μM. STI571 inhibited PDGF-BB-stimulated A10 cell proliferation with an IC50 value of 0.2 μM.
In Vivo	**Animal experiment**	
	Applications:	
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

[1] Elisabeth Buchdunger, Catherine L. Cioffi, Norman Law, David Stover, Sayuri Ohno-Jones, Brian J. Druker And Nicholas B. Lydon. Abl protein-tyrosine kinase inhibitor sti571 inhibits in vitro signal transduction mediated by c-kit and platelet-derived growth factor receptors. The journal of pharmacology and experimental therapeutics. 2000, 295(1): 139-145.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.