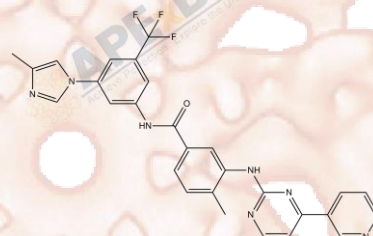


Product Data Sheet

Nilotinib (AMN-107)

Cat. No.:	A8232
CAS No.:	641571-10-0
Formula:	C ₂₈ H ₂₂ F ₃ N ₇ O
M.Wt:	529.53
Synonyms:	AMN-107; Tasigna; AMN107
Target:	TGF- β / Smad Signaling
Pathway:	Bcr-Abl
Storage:	Store at -20°C



Solvent & Solubility

≥26.5 mg/mL in DMSO; insoluble in H₂O; ≥5 mg/mL in EtOH with gentle warming and ultrasonic

In Vitro

	Solvent	Mass		
		1mg	5mg	10mg
Preparing Stock Solutions	Concentration			
	1 mM	1.8885 mL	9.4423 mL	18.8847 mL
	5 mM	0.3777 mL	1.8885 mL	3.7769 mL
	10 mM	0.1888 mL	0.9442 mL	1.8885 mL

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

Biological Activity

Shortsummary

Bcr-Abl kinase inhibitor, selective

IC₅₀ & Target

30 nM (Bcr-Abl)

In Vitro

Cell Viability Assay

Cell Line:	CD34+ cells from individual patients with CML
Preparation method:	The solubility of this compound in DMSO is >10 mM. 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:	5 μ M, 16 hours

	Applications:	After 16 hours in culture with nilotinib, long enough for inhibition of CrkL phosphorylation but not for induction of apoptosis, the total CD34+ cell samples studied exhibited only partial and variable inhibition (range, 49% to 0% inhibition) of CrkL phosphorylation.
In Vivo	Animal experiment	
	Animal models:	C57Bl/6J mice injected with 8093 lymphoma cells
	Dosage form:	Oral administration, 75 mg/kg, daily
	Applications:	Vehicle treated mice became moribund within 3 weeks of the transplantation. They showed clear symptoms of ALL. Nilotinib-treated mice lived statistically significantly longer as compared with the vehicle-treated mice. This result clearly indicated that nilotinib was very effective in inhibiting the proliferation of the leukemic cells in vivo.
	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

1. Saebom Lee ,Sangjune Kim ,et al."The c-Abl inhibitor, Radotinib HCl is neuroprotective in a preclinical Parkinson's disease mouse model." Human Molecular Genetics, ddy143.

See more customer validations on www.apexbt.com.

References

- [1] Jørgensen H G, Allan E K, Jordanides N E, et al. Nilotinib exerts equipotent antiproliferative effects to imatinib and does not induce apoptosis in CD34+ CML cells. Blood, 2007, 109(9): 4016-4019.
- [2] Kaur P, Feldhahn N, Zhang B, et al. Nilotinib treatment in mouse models of P190 Bcr/Abl lymphoblastic leukemia. Mol Cancer, 2007, 6(10): 67-77.

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 APEX BIO 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.

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