



LKT Laboratories, Inc.

Nilotinib

Phone: 888-558-5227

651-644-8424

Fax: 888-558-7329

Email: getinfo@lktlabs.com

Web: lktlabs.com

Product Information

Product ID N3346

CAS No. 641571-10-0

Chemical Name 4-Methyl-N-(3-(4-methylimidazol-1-yl)-5-(trifluoromethyl)phenyl)-3-((4-pyridin-3-ylpyrimidin-2-yl)amino)benzamide

Synonym AMN 107, Tassigna

Formula C₂₈H₂₂F₃N₇O

Formula Wt. 529.52

Melting Point

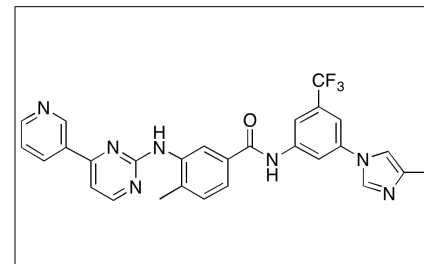
Purity ≥98%

Solubility

Store Temp Ambient

Ship Temp Ambient

Description Nilotinib is a second-generation phenylamino pyridine tyrosine kinase inhibitor that is clinically used to treat Bcr-Abl-positive chronic myelogenous leukemia (CML). Nilotinib is an ATP-competitive inhibitor of Abl, c-Kit, and PDGFR that exhibits anticancer chemotherapeutic, anti-fibrotic, anti-allergic, and anti-inflammatory activities. In cellular and animal models of hepatocellular carcinoma, nilotinib increases activation of AMPK and inhibits protein phosphatase 2A (PP2A), inducing autophagy in vitro and inhibiting tumor xenografts growth in vivo. In hepatic stellate cells, nilotinib decreases expression of histone deacetylases 1, 2, and 4 (HDAC1/2/4), increasing apoptotic cell death. In animal models of allergic reaction and inflammation, nilotinib inhibits expression of TNF-α and prevents mast cell histamine release, decreasing paw edema and preventing systemic anaphylaxis.



Bulk quantities available upon request

Product ID	Size
N3346	10 mg
N3346	25 mg
N3346	100 mg

References Shaker ME, Ghani A, Shiha GE, et al. Nilotinib induces apoptosis and autophagic cell death of activated hepatic stellate cells via inhibition of histone deacetylases. *Biochim Biophys Acta*. 2013 Aug;1833(8):1992-2003. PMID: 23499874.

Yu HC, Lin CS, Tai WT, et al. Nilotinib induces autophagy in hepatocellular carcinoma through AMPK activation. *J Biol Chem*. 2013 Jun 21;288(25):18249-59. PMID: 23677989.

El-Agamy DS. Anti-allergic effects of nilotinib on mast cell-mediated anaphylaxis like reactions. *Eur J Pharmacol*. 2012 Apr 5;680(1-3):115-21. PMID: 22329898.

Fabbro D, Manley PW, Jahnke W, et al. Inhibitors of the Abl kinase directed at either the ATP- or myristate-binding site. *Biochim Biophys Acta*. 2010 Mar;1804(3):454-62. PMID: 20152788.

Quintás-Cardama A, Cortes J. Nilotinib: a phenylamino-pyrimidine derivative with activity against BCR-ABL, KIT and PDGFR kinases. *Future Oncol*. 2008 Oct;4(5):611-21. PMID: 18922118.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.