LKT Laboratories, Inc.

Dasatinib Monohydrate

Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lktlabs.com
Web: lktlabs.com

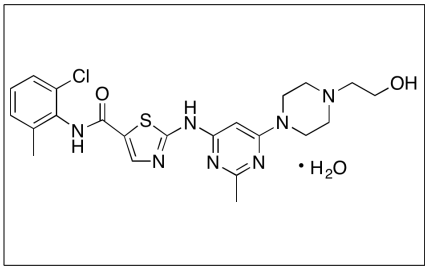
Product Information

Product ID D0375

CAS No. 863127-77-9

Chemical Name N-(2-chlro-6-methylphenyl)-2-[[6-[4[(2-hydroxyethyl)-1-piperazinyl]-2-methyl-4-pyrimidinyl]amino]-5-thiazole carboxamide monohydrate

Synonym



Formula $C_{22}H_{26}ClN_7O_2S \cdot H_2O$

Formula Wt. 506.02

Melting Point 280-286°C

Purity ≥98%

Solubility Sparingly soluble in water (5.06 mg/ml), and ethanol. Soluble in DMSO (200 mg/ml).

Store Temp Ambient

Ship Temp Ambient

Bulk quanitites available upon request

Product ID	Size
D0375	10 mg
D0375	25 mg
D0375	100 mg
D0375	500 mg

Description Dasatinib is an anticancer chemotherapeutic compound that inhibits Abl, PDGFR, ephrin receptors, Src, c-Kit, and other Src-family kinases (LCK, HCK, FYN, and others). Dasatinib is clinically used to treat chronic myelogenous leukemia (CML) and acute lymphocytic leukemia (ALL); in acute myelogenous leukemia (AML) cells, dasatinib induces myeloid differentiation and autophagy. Dasatinib also displays antiviral activity, preventing dengue virus infection through its inhibition of FYN kinase.

References

Xie N, Zhong L, Liu L, et al. Autophagy contributes to dasatinib-induced myeloid differentiation of human acute myeloid leukemia cells. Biochem Pharmacol. 2014 May 1;89(1):74-85. PMID: 24607273.

de Wispelaere M, LaCroix AJ, Yang PL. The small molecules AZD0530 and dasatinib inhibit dengue virus RNA replication via Fyn kinase. J Virol. 2013 Jul;87(13):7367-81. PMID: 23616652.

Montero JC, Seoane S, Ocaña A, et al. Inhibition of SRC family kinases and receptor tyrosine kinases by dasatinib: possible combinations in solid tumors. Clin Cancer Res. 2011 Sep 1;17(17):5546-52. PMID: 21670084.

Das J, Chen P, Norris D, et al. 2-aminothiazole as a novel kinase inhibitor template. Structure-activity relationship studies toward the discovery of N-(2-chloro-6-methylphenyl)-2-[[6-[4-(2-hydroxyethyl)-1- piperazinyl)]-2-methyl-4-pyrimidinyl]amino)] -1,3-thiazole-5-carboxamide (dasatinib, BMS-354825) as a potent pan-Src kinase inhibitor. J Med Chem. 2006 Nov 16;49 (23):6819-32. PMID: 17154512.