

Product Information

Product ID G5320
CAS No. 778270-11-4
Chemical Name

Synonym

Formula C₁₈H₁₃F₃N₄O₂
Formula Wt. 374.32

Melting Point

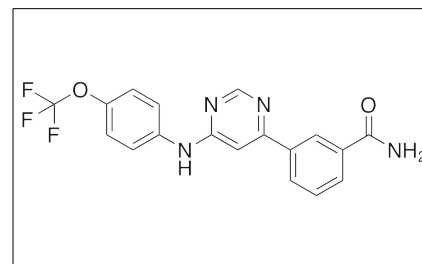
Purity ≥98%

Solubility DMSO 74 mg/mL (197.69 mM)
Water Insoluble
Ethanol Insoluble

Store Temp Ambient

Ship Temp Ambient

Description GNF-2 is an inhibitor of Abl kinase that exhibits anticancer chemotherapeutic, anti-resorptive, and anti-osteoporotic activities. GNF-2 shows potential benefit in the treatment of Philadelphia chromosome-positive acute myelogenous leukemia (ALL). In vitro, GNF-2 inhibits differentiation of osteoclasts, activity of NF-κB, and induction of c-Fos and NFATc1, resulting in caspase-mediated apoptosis. GNF-2 also inhibits resorption of mature osteoclasts and prevents phagocytosis in bone marrow-derived macrophages. In vivo, this compound decreases osteoclast numbers and prevents bone loss.



Bulk quantities available upon request

Product ID	Size
G5320	1 mg
G5320	5 mg
G5320	25 mg

References Kim HJ, Yoon HJ, Choi JY, et al. The tyrosine kinase inhibitor GNF-2 suppresses osteoclast formation and activity. *J Leukoc Biol.* 2014 Feb;95(2):337-45. PMID: 24130113.

Greuber EK, Pendergast AM. Abl family kinases regulate FcγR-mediated phagocytosis in murine macrophages. *J Immunol.* 2012 Dec 1;189(11):5382-92. PMID: 23100514.

Mian AA, Metodieva A, Najajreh Y, et al. p185(BCR/ABL) has a lower sensitivity than p210(BCR/ABL) to the allosteric inhibitor GNF-2 in Philadelphia chromosome-positive acute lymphatic leukemia. *Haematologica.* 2012 Feb;97(2):251-7. PMID: 22058195.

Deng X, Okram B, Ding Q, et al. Expanding the diversity of allosteric bcr-abl inhibitors. *J Med Chem.* 2010 Oct 14;53(19):6934-46. PMID: 20828158.

Adrián FJ, Ding Q, Sim T, et al. Allosteric inhibitors of Bcr-abl-dependent cell proliferation. *Nat Chem Biol.* 2006 Feb;2(2):95-102. PMID: 16415863.

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