Product Data Sheet

GNF 5

Cat. No.:	A8604
CAS No.:	778277-15-9
Formula:	C20H17F3N4O3
M.Wt:	418.37
Synonyms:	
Target:	TGF-β / Smad Signaling
Pathway:	Bcr-Abl
Storage:	Store at -20°C

Solvent & Solubility

In Vitro

insoluble in H2O; ⩾10 mg/mL in EtOH with gentle warming; ⩾20.9 mg/mL in DMSO

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	2.3902 mL	11.9511 mL	23.9023 mL
5 mM	0.4780 mL	2.3902 mL	4.7805 mL
10 mM	0.2390 mL	1.1951 mL	2.3902 mL

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

Biological Activity

Shortsummary	Bcr-Abl inhibitor
IC_{50} & Target	220 nM (Bcr-Abl)

In Vitro

Cell Viability Assay

Cell Line:	Wild-type or Bcr-Abl transformed Ba/F3 cells
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:	0-3 μM

	Applications:	Inhibition of wild-type Abl was observed for both inhibitors with GNF-5 exhibiting an IC50 value of 0.22 mM, dasatinib using an ATP concentration of 20 mM with an IC50 value of 0.12 mM. The myristate site mutant E505K was inhibited by dasatinib with an IC50 value of 0.02 mM, but not by GNF-5 (IC50>10 mM).
In Vivo	**Animal experiment**	
	Animal models:	Abl-lox and SM22cre mice on C57BL/6 background
	Dosage form:	Animals were intranasally instilled with 10 mg/kg GNF-5 or PBS 1 h before OVA instillation and 5 h after OVA instillation for last three weeks.
	Applications:	In conditional knockout of Abl mice, the levels of IL-13 and CCL2 in bronchoalveolar lavage fluid treated with ovalbumin has not been affected, but it works after treatment with imatinib and GNF-5 as well as airway resistance and smooth muscle growth in animals. Treatment with imatinib or GNF-5 inhibited the ACh-induced contraction in isolated mouse tracheal rings of OVA-sensitized and challenged mice. Treatment with imatinib or GNF-5 diminished the fluorescent intensity of PCNA in BALB/c mice treated with OVA.
	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]. Iacob RE, Zhang J, Gray NS et al. Allosteric interactions between the myristate- and ATP-site of the Abl kinase. PLoS One. 2011 Jan 10;6(1):e15929.

[2]. Cleary RA, Wang R, Wang T et al. Role of Abl in airway hyperresponsiveness and airway remodeling. Respir Res. 2013 Oct 11;14:105.

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.

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