

PRODUCT INFORMATION

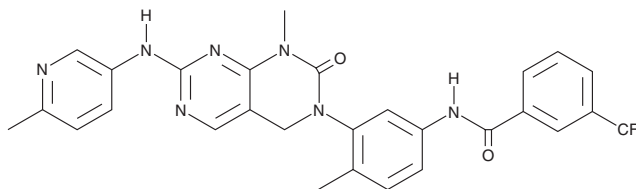


GNF-7

Item No. 19918

CAS Registry No.: 839706-07-9
Formal Name: N-[3-[1,4-dihydro-1-methyl-7-[(6-methyl-3-pyridinyl)amino]-2-oxopyrimido[4,5-d]pyrimidin-3(2H-yl)-4-methylphenyl]-3-(trifluoromethyl)-benzamide

MF: C₂₈H₂₄F₃N₇O₂
FW: 547.5
Purity: ≥98%
UV/Vis.: λ_{max}: 277 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

GNF-7 is supplied as a crystalline solid. A stock solution may be made by dissolving the GNF-7 in the solvent of choice, which should be purged with an inert gas. GNF-7 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of GNF-7 in these solvents is approximately 0.1, 2, and 10 mg/ml, respectively.

GNF-7 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, GNF-7 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. GNF-7 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

GNF-7 is a multi-kinase inhibitor (IC₅₀s = 25, 8, 61, 122, 136, and 133 nM for ACK1, GCK, Bcr-Abl^{T315I}, Bcr-Abl^{E255V}, Bcr-Abl^{G250E}, and c-Abl, respectively).^{1,2} It also inhibits several additional kinases in a panel by greater than 50% when used at a concentration of 10 μM.² GNF-7 inhibits the growth of Ba/F3 cells transformed with wild-type Bcr-Abl, Bcr-Abl^{T315I}, Bcr-Abl^{E255V}, and Bcr-Abl^{G250E} (IC₅₀s = <5 nM), as well as COLO 205 and SW625 cancer cells (IC₅₀s = 1 and 5 nM, respectively) *in vitro*. *In vivo*, GNF-7 (10 and 20 mg/kg) reduces tumor growth in a Bcr-Abl^{T315I} Ba/F3 mouse xenograft model. It also reduces tumor volume in an OCI-AML3 mouse xenograft model when administered at a dose of 8 mg/kg.¹

References

1. Cho, H., Shin, I., Ju, E., *et al.* First SAR study for overriding NRAS mutant driven acute myeloid leukemia. *J. Med. Chem.* **61**(18), 8353-8373 (2018).
2. Choi, H.G., Ren, P., Adrian, F., *et al.* A type-II kinase inhibitor capable of inhibiting the T315I "gatekeeper" mutant of Bcr-Abl. *J. Med. Chem.* **53**(15), 5439-5448 (2010).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM