

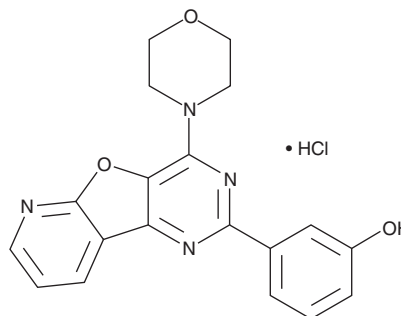
PRODUCT INFORMATION



PI-103 (hydrochloride)

Item No. 21187

CAS Registry No.: 371935-79-4
Formal Name: 3-[4-(4-morpholinyl)pyrido[3',2':4,5]furo[3,2-d]pyrimidin-2-yl]-phenol, monohydrochloride
MF: C₁₉H₁₆N₄O₃ • HCl
FW: 384.8
Purity: ≥98%
UV/Vis.: λ_{max}: 211, 288, 319 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

PI-103 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the PI-103 (hydrochloride) in the solvent of choice. PI-103 (hydrochloride) is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of PI-103 (hydrochloride) in these solvents is approximately 5 and 1 mg/ml, respectively.

PI-103 (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PI-103 (hydrochloride) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. PI-103 (hydrochloride) has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

PI-103 is a potent, cell-permeable, ATP-competitive inhibitor of PI3K family members with selectivity toward DNA-PK, PI3K (p110α), and mTORC1. The IC₅₀ values are 2, 8, 20, 26, 48, 83, 88, and 150 nM for DNA-PK, p110α, mTORC1, PI3-KC2β, p110δ, mTORC2, p110β, and p110γ, respectively.¹ PI-103 exhibits antiproliferative activity against a panel of glioma cell lines *in vitro* at a concentration of 0.5 μM. It also inhibits growth of established human glioma tumor xenografts *in vivo* with no observable toxicity.²

References

1. Knight, Z.A., Gonzalez, B., Feldman, M.E., *et al.* A pharmacological map of the PI3-K family defines a role for p110α in insulin signaling. *Cell* **125**(4), 733-747 (2006).
2. Fan, Q.W., Knight, Z.A., Goldenberg, D.D., *et al.* A dual PI3 kinase/mTOR inhibitor reveals emergent efficacy in glioma. *Cancer Cell* **9**(5), 341-349 (2006).

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.

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