

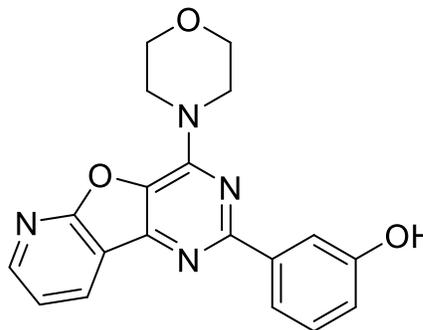
PI-103 (PI 3-Kinase α Inhibitor 1)

Catalog number: B-0303

Molecular Formula: C₁₉H₁₆N₄O₃

MW: 348.4

CAS: 371935-74-9



Alternate Name: 3-(4-(4-Morpholinyl)pyrido[3',2':4,5]furo[3,2-d]pyrimidin-2-yl)phenol

Solubility: water: insoluble, DMSO: 10 mg/mL

Storage and Handling: Store dry at -20 °C. Stock solutions should be stored frozen (-20 °C or below).

Background: PI-103 is a selective inhibitor for the α -isoform of PI 3-Kinase (IC₅₀: PI 3-K α = 8 nM, PI 3-K β = 88 nM, PI 3-K γ = 48 nM, PI 3-K δ = 150 nM). It also inhibits DNA-PK (IC₅₀ = 2 nM) and mTOR1 and mTOR2 (IC₅₀ = 20 & 83 nM). It shows little activity against a wide array of protein kinases at 10 μ M. It blocks glioma proliferation by blocking the PI 3-K/Akt pathway *in vitro* and *in vivo*.

References: 1) Knight, Z.A., et al. "A pharmacological map of the PI 3-K family defines a role for p110 α in insulin signaling." *Cell* 2006, 125, 733-747. 2) Fan, Q., et al. "A dual PI3 kinase/mTOR inhibitor reveals emergent efficacy in glioma." *Cancer Cell* 2006, 9, 341-349.

Hazardous Properties and Cautions: The toxicological and pharmacological properties of this compound are not fully known. For further information see the MSDS on request. This product is manufactured and shipped only in small quantities, intended for research and development in a laboratory utilizing prudent procedures for handling chemicals of unknown toxicity, under the supervision of persons technically qualified to evaluate potential risks and authorized to enforce appropriate health and safety measures. As with all research chemicals, precautions should be taken to avoid unnecessary exposures or risks.

Warranty and Disclaimer: Echelon warrants the product conforms to the specifications stated herein. In the event of nonconformity, Echelon will replace products or refund purchase price, at its sole option, and Echelon shall not be responsible for any other loss or damage, whether known or foreseeable to Echelon. No other warranties apply, express or implied, including but not limited to warranty of fitness for any purpose or implied warranty of merchantability. Purchaser is solely responsible for all consequences of its use of the product and Echelon assumes no responsibility therefore, including success of purchaser's research and development, or health or safety of any uses of the product.

