



LKT Laboratories, Inc.

PI-103

Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lktlabs.com
Web: lktlabs.com

Product Information

Product ID P321001

CAS No. 371935-74-9

Chemical Name

Synonym

Formula $C_{19}H_{16}N_4O_3$

Formula Wt. 348.4

Melting Point

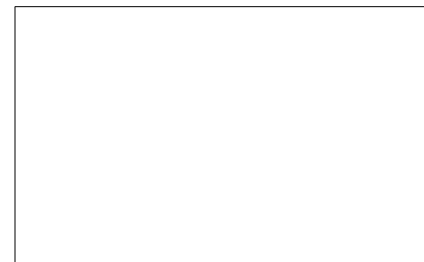
Purity $\geq 98\%$

Solubility

Store Temp -20°C

Ship Temp Ambient

Description PI-103 is a cell-permeable, dual inhibitor of class I phosphoinositide 3-kinases (PI3K α , PI3K δ , and PI3K γ) and mTOR (mTORC1 and mTORC2), acting on a shared catalytic domain in these related kinases. By simultaneously blocking both nodes of the PI3K/AKT/mTOR pathway, PI-103 more completely suppresses AKT phosphorylation than selective PI3K inhibitors alone, reducing proliferative signaling and inducing autophagy. PI-103 is widely used in cancer biology research to study PI3K/mTOR pathway dependencies and feedback mechanisms.



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
P321001	1 mg	\$58.00
P321001	5 mg	\$150.00
P321001	10 mg	\$250.00

- References**
1. Knight ZA, Gonzalez B, Feldman ME, et al. A pharmacological map of the PI3-K family defines a role for p110 α in insulin signaling. *Cell*. 2006;125(4):733-47. PMID: 16647110.
 2. Raynaud FI, Eccles S, Clarke PA, et al. Pharmacologic characterization of a potent inhibitor of class I phosphatidylinositide 3-kinases. *Cancer Res*. 2007;67(12):5840-50. PMID: 17575151.
 3. Fan QW, Knight ZA, Goldenberg DD, et al. A dual PI3 kinase/mTOR inhibitor reveals emergent efficacy in glioma. *Cancer Cell*. 2006;9(5):341-9. PMID: 16697955.
 4. Cantley LC. The phosphoinositide 3-kinase pathway. *Science*. 2002;296(5573):1655-7. PMID: 12040186.
 5. Engelman JA, Luo J, Cantley LC. The evolution of phosphatidylinositol 3-kinases as regulators of growth and metabolism. *Nat Rev Genet*. 2006;7(8):606-19. PMID: 16847462.

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