LKT Laboratories, Inc.

BKM120

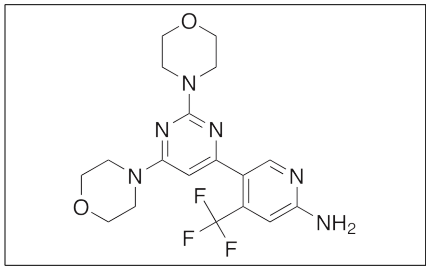
Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lktlabs.com
Web: lktlabs.com

Product Information

Product ID B4248
CAS No. 944396-07-0
Chemical Name

Synonym Buparlisib, NVP-BKM120

Formula $C_{18}H_{21}F_3N_6O_2$
Formula Wt. 410.39
Melting Point
Purity ≥98%
Solubility DMSO 82 mg/mL (199.8 mM)
Ethanol 2 mg/mL (4.87 mM)
Water Insoluble
Store Temp 4˚C
Ship Temp Ambient



Bulk quanitites available upon request

Product ID	Size
B4248	1 mg
B4248	5 mg

Description BKM120 is an inhibitor of PI3K that is currently in clinical trials as a potential treatment for brain metastases of HER2+ breast cancer and other solid tumors. BKM120 exhibits anticancer chemotherapeutic and anti-metastatic activities, inducing G2/M phase cell cycle arrest, polyploidy, and apoptosis in glioblastoma cells. Additionally, BKM120 decreases levels of Mcl-1 and enhances TRAIL-dependent apoptosis in lung cancer cells. BKM120 also binds tubulin, inhibiting microtubule polymerization. This compound prevents invasion and epithelial-to-mesenchymal transition (EMT) in cellular and animal models of squamous cell lung cancer.

References

Bonelli MA, Cavazzoni A, Saccani F, et al. Inhibition of PI3K pathway reduces invasiveness and epithelial-to-mesenchymal transition in squamous lung cancer cell lines harboring PIK3CA gene alterations. Mol Cancer Ther. 2015 May 26. [Epub ahead of print]. PMID: 26013318.

Wachsberger PR, Lawrence YR, Liu Y, et al. Hsp90 inhibition enhances PI-3 kinase inhibition and radiosensitivity in glioblastoma. J Cancer Res Clin Oncol. 2014 Feb 6. [Epub ahead of print]. PMID: 24500492.

Ando Y, Inada-Inoue M, Mitsuma A, et al. Phase I dose-escalation study of buparlisib (BKM120), an oral pan-class I PI3K inhibitor, in Japanese patients with advanced solid tumors. Cancer Sci. 2014 Jan 10. [Epub ahead of print]. PMID: 24405565.

Ren H, Zhao L, Li Y, et al. The PI3 kinase inhibitor NVP-BKM120 induces GSK3/FBXW7-dependent Mcl-1 degradation, contributing to induction of apoptosis and enhancement of TRAIL-induced apoptosis. Cancer Lett. 2013 Sep 28;338(2):229-38. PMID: 23562472.

Brachmann SM, Kleylein-Sohn J, Gaulis S, et al. Characterization of the mechanism of action of the pan class I PI3K inhibitor NVP-BKM120 across a broad range of concentrations. Mol Cancer Ther. 2012 Aug;11(8):1747-57. PMID: 22653967.