



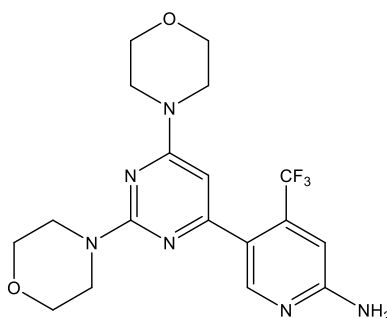
Catalog # 10-4325

Buparlisib

CAS# 944396-07-0

5-(2,6-Dimorpholin-4-ylpyrimidin-4-yl)-4-(trifluoromethyl)pyridine-2-amine; NVP-BKM120

Lot # FBS2101



Buparlisib is potent pan-Class I PI3-kinase inhibitor (IC_{50} 's: $p110\alpha = 52$ nM, $p110\beta = 166$ nM, $p110\delta = 116$ nM, $P110\gamma = 262$ nM).^{1,2} It inhibited microtubule dynamics at in vitro concentrations $>1\mu M$ and doses above 50mg/kg in mice.³ Buparlisib lead to a precipitous drop in DNA synthesis in a mouse model of BRCA1-linked triple-negative breast cancer with less affect in normal tissue.⁴

- 1) Burger *et al.* (2011), *Identification of NVP-BKM120 as a Potent, Selective, Orally Bioavailable Class I PI3 Kinase Inhibitor for Treating Cancer*; ACS Med. Chem. Lett. **2** 774
- 2) Maira *et al.* (2012), *Identification and Characterization of NVP-BKM120, an Orally Available Pan-Class I PI3-Kinase Inhibitor*; Mol. Cancer Ther. **11** 317
- 3) Brachmann *et al.* (2012), *Characterization of the mechanism of action of the pan class I PI3K inhibitor NVP-BKM120 across a broad range of concentrations*; Mol. Cancer Ther. **11** 1747
- 4) Juvekar *et al.* (2016), *Phosphoinositide 3-kinase inhibitors induce DNA damage through nucleoside depletion*; Proc. Natl. Acad. Sci USA. **113** E4338

PHYSICAL DATA

Molecular Weight: 410.39
Molecular Formula: $C_{18}H_{21}F_3N_6O_2$
Purity: $>99\%$ by HPLC
NMR: (Conforms)
Solubility: DMSO (15 mg/ml)
Physical Description: White solid
Storage and Stability: Store as supplied at $-20^{\circ}C$ for up to 1 year from the date of purchase. Solutions in DMSO may be stored at $-20^{\circ}C$ for up to 3 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.

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