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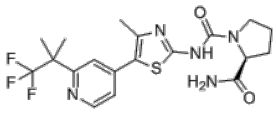
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	Alpelisib
Cat. No.	:	PC-20590
CAS No.	:	1217486-61-7
Molecular Formula	:	$C_{19}H_{22}F_3N_5O_2S$
Molecular Weight	:	441.47
Target	:	PI3K
Solubility	:	10 mM in DMSO



CAS: 1217486-61-7

Biological Activity

Alpelisib (NVP-BYL719, BYL719) is ia potent, selective, and orally active **PI3Kα** inhibitor with IC50 of 5 nM, >50-fold selectivity over p110γ/p110δ/p110β.
Alpelisib (BYL719) potently inhibits PIK3CA somatic mutations (H1047R, E545K) with IC50 of 4 nM.
Alpelisib (BYL719) potently inhibits Akt phosphorylation in cells transformed with PI3Kα (IC50=74 nM) and shows significant reduced inhibitory activity in PI3Kβ or PI3Kδ isoforms transformed cells (>15-fold).
Alpelisib (BYL719) (0-50 uM) inhibits the cell growth of osteosarcoma cell lines MG63, HOS, POS-1 and MOS-J in a dose-dependent manner.
Alpelisib (BYL719) potently suppresses proliferation and PI3K signaling in human breast cancer cells harboring PIK3CA(H1047R) in combination with lapatinib.
Alpelisib (BYL719) inhibits growth factor-independent KRASG12D BM colony formation and sensitizes cells to a low dose of the MEK inhibitor MEK162.

References

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