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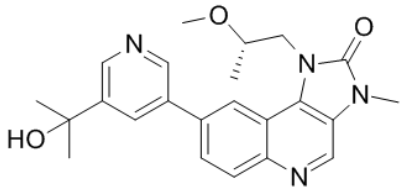
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	LY3023414
Cat. No.	:	PC-43082
CAS No.	:	1386874-06-1
Molecular Formula	:	$C_{23}H_{26}N_4O_3$
Molecular Weight	:	406.4775
Target	:	PI3K
Solubility	:	10 mM in DMSO



Biological Activity

LY3023414 is a potent, dual **PI3K/mTOR** inhibitor with IC50 of 6.07 nM, 77.6 nM, 38 nM, 23.8 nM, 165 nM and 4.24 nM for PI3Kα, PI3Kβ, PI3Kδ, PI3Kγ, mTOR and DNA-PK, respectively.
LY3023414 inhibits the phosphorylation of AKT at position T308 with IC50 of 106 nM in the PTEN-deficient U87 MG glioblastoma cell line, inhibits phosphorylation of AKT at position S473 (IC50=94.2 nM) by mTORC2 as well as phosphorylation of mTORC1 kinase targets p70S6K (position T389; IC50=10.6 nM).
LY3023414 causes G1 cell-cycle arrest and shows broad antiproliferative activity in cancer cell panel screens.
LY3023414 exhibits antitumor activity in multiple xenograft models.

References

Smith MC, et al. ***Mol Cancer Ther.*** 2016 Oct;15(10):2344-2356.

Zaidi AH, et al. ***Ann Surg.*** 2017 Jul;266(1):91-98.

Wei L, et al. ***Oncotarget.*** 2016 Nov 22;7(47):76374-76389.

Zheng L, et al. ***Oncotarget.*** 2017 Oct 27;8(58):98964-98973.

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