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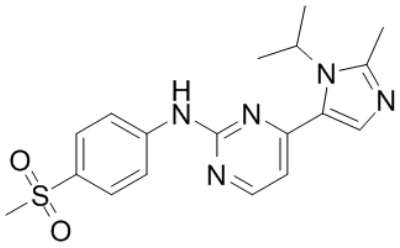
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	AZD-5438
Cat. No.	:	PC-42060
CAS No.	:	602306-29-6
Molecular Formula	:	$C_{18}H_{21}N_5O_2S$
Molecular Weight	:	371.4566
Target	:	Cyclin-dependent Kinase (CDK)
Solubility	:	10 mM in DMSO



Biological Activity

AZD-5438 (AZD5438) potent and oral inhibitor of **CDK1/2/9** with IC50 of 16/6/20 nM, respectively.
AZD-5438 also inhibits the kinase activity of p25-Cdk5 (IC50=14 nM) and GSK-3β (IC50=17 nM) in vitro, displays 75-fold less active against cyclin D-Cdk4.
AZD-5438 shows significant antiproliferative activity in human tumor cell lines (IC50 range: 0.2-1.7 uM), inhibits the phosphorylation of Cdk substrates pRb, nucleolin, PP1A, and RNA polymerase II COOH-terminal domain and blocks cell cycle.
AZD-5438 inhibits the human tumor xenograft growth in vivo.
AZD-5438 also inhibits PASTA kinase in L. monocytogenes (PrkA) and L. monocytogenes growth in a β-lactam-synergism-dependent manner.

References

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Boss DS, et al. ***Ann Oncol.*** 2010 Apr;21(4):884-94.

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Raghavan P, et al. ***Int J Radiat Oncol Biol Phys***. 2012 Nov 15;84(4):e507-14.

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