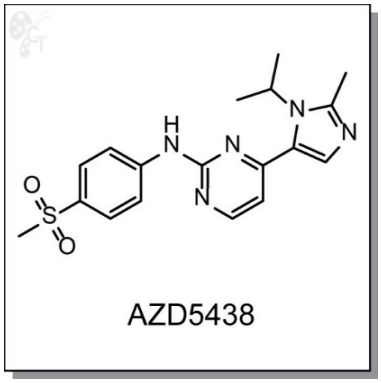
Product Specification Sheet

Product Name: AZD5438

Catalog Number: C2543



Technical information:

Chemical Formula:	$C_{18}H_{21}N_5O_2S$
CAS #:	602306-29-6
Molecular Weight:	371.46
Purity:	> 98%
Appearance:	Pale Orange solid
Solubility:	Soluble in DMSO up to 100 mM
Chemical Name:	4-(1-isopropyl-2-methyl-1H-imidazol-5-yl)-N-(4-(methylsulfonyl)phenyl)pyrimidin-2-amine
Storage:	Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.
Shelf Life:	In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.

Handling:

- To make 10 mM stock solution, add 0.269mL of DMSO for each mg of AZD5438
- For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

Biological Activity:

AZD5438 is an orally-bioavailable imidazole-pyrimidine inhibitor of cyclin dependent kinase (CDK) 1, 2, and 9 at IC50s of 16, 6, and 20 nM, respectively. In vitro AZD5438 showed significant antiproliferative activity in human tumor cell lines with IC50s in the range of 0.2-1.7 uM, inhibiting phosphorylation of CDK substrates pRb, nucleolin, protein phosphatase 1a, and RNA polymerase II carboxylate-terminus. AZD5438 blocks cell cycling at the G2-M, S, and G1 phases and maintains suppression of biomarkers such as phospho-pRbSer249/Thr252 for up to 16h following a single oral dose in SW620 cells. [1]

Reference:

1. Byth et al., AZD5438, a potent oral inhibitor of cyclin-dependent kinases 1, 2, and 9, leads to pharmacodynamic changes and potent antitumor effects in human tumor xenografts. Mol. Cancer. Ther. 2009, 8, 1856-1866. Pubmed ID: 19509270

To reorder: http://www.cellagentech.com/AZD5438/

For Technical Support: technical@cellagentech.com

Chemicals are sold for research use only, not for clinical or diagnostic use.