

Product data sheet



MedKoo Cat#: 406191 Name: AZ-960 CAS#: 905586-69-8 Chemical Formula: C ₁₈ H ₁₆ F ₂ N ₆ Exact Mass: 354.14045 Molecular Weight: 354.36	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.

1. Product description:

AZ960 is a novel inhibitor of Jak2 kinase. AZ960 inhibits JAK2 kinase with a K_i of 0.00045 microm in vitro and treatment of TEL-JAK2 driven Ba/F3 cells with AZ960 blocked STAT5 phosphorylation and potently inhibited cell proliferation (GI₅₀)=0.025 microm). AZ960 demonstrated selectivity for TEL-JAK2-driven STAT5 phosphorylation and cell proliferation when compared with cell lines driven by similar fusions of the other JAK kinase family members.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	30	84.66

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.82 mL	14.11 mL	28.22 mL
5 mM	0.56 mL	2.82 mL	5.64 mL
10 mM	0.28 mL	1.41 mL	2.82 mL
50 mM	0.06 mL	0.28 mL	0.56 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

1. Yang J, Ikezoe T, Nishioka C, Furihata M, Yokoyama A. AZ960, a novel Jak2 inhibitor, induces growth arrest and apoptosis in adult T-cell leukemia cells. *Mol Cancer Ther.* 2010 Dec;9(12):3386-95. doi: 10.1158/1535-7163.MCT-10-0416. PMID: 21159615.

2. Gozgit JM, Beberitz G, Patil P, Ye M, Parmentier J, Wu J, Su N, Wang T, Ioannidis S, Davies A, Huszar D, Zinda M. Effects of the JAK2 inhibitor, AZ960, on Pim/BAD/BCL-xL survival signaling in the human JAK2 V617F cell line SET-2. *J Biol Chem.* 2008 Nov 21;283(47):32334-43. doi: 10.1074/jbc.M803813200. Epub 2008 Sep 4. PMID: 18775810.

In vivo study

TBD

7. Bioactivity

Biological target:

AZ960 is a potent and specific inhibitor of the JAK2 kinase with a K_i of 0.45 nM.

In vitro activity

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AZ960, a novel inhibitor of Jak2 kinase, effectively induced growth arrest and apoptosis of human T-cell lymphotropic virus type 1, HTLV-1-infected T cells (MT-1 and MT-2) in parallel with downregulation of the phosphorylated forms of Jak2 and Bcl-2 family proteins including Bcl-2 and Mcl-1. Interestingly, AZ960 increased levels of Bcl-xL in MT-1 and MT-2 cells in association with accumulation of cAMP response element-binding protein bound to the Bcl-xL promoter as measured by chromatin immunoprecipitation assay. Importantly, genetic inhibition of Bcl-xL by a small interfering RNA potentiated antiproliferative effects of AZ960 in MT-1 cells.

Reference: Mol Cancer Ther. 2010 Dec;9(12):3386-95. <http://mct.aacrjournals.org/cgi/pmidlookup?view=long&pmid=21159615>

In vivo activity

TBD

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.