#### Cat No. 09-B31

### AZD1480

#### 5mg



## For research purposes only

AZD1480 is a potent JAK2 inhibitor that can suppress growth, survival, as well as FGFR3 and STAT3 signaling and downstream targets. AZD1480 is a potent, competitive small-molecule inhibitor of JAK1/2 kinase, and is capable of inhibiting STAT3 phosphorylation and tumor growth in a STAT3-dependent manner. This may lead to induction of tumor cell apoptosis and a decrease in cellular proliferation. JAK2, often upregulated or mutated in a variety of cancer cells, mediates STAT3 activation and plays a key role in tumor cell proliferation and survival.

#### **TECHNICAL INFORMATION**



# STORAGE AND HANDLING

**Storage:** Store at 4°C and protected from light. Following reconstitution, store aliquots at -20°C.

**Stability:** Stock solutions stable at -20°C for up to 2 years.

Shipping Conditions: Shipped at room temperature.

#### **PRODUCT USE**

Soluble in  $\geq$ 70mg/mL of DMSO.

**Other Names:** (S)-5-chloro-N2-(1-(5-fluoropyrimidin-2 -yl)ethyl)-N4-(5-methyl-1H-pyrazol-3-yl)pyrimidine-2,4-diamine

**Chemical Formula:** C<sub>14</sub>H<sub>14</sub>CIFN<sub>8</sub>

CAS Number: 935666-88-9

PubChem Substance ID: 16659841

Molecular Weight: 348.77

**Purity: >97%** 

Appearance: Off White Powder

Solubility: DMSO

IC50: JAK1=1.3nM, JAK2=.26nM

#### REFERENCES

- 1. Derenzine, E., et al (2011). The JAK inhibitor AZD1480 regulates proliferation and immunity in Hodgkin lymphoma. Blood Cancer J. 1:e46.
- Loveless, M.E., et al (2012). Comparisons of the efficacy of a JAK 1/2 inhibitor (AZD1480) with a VEGF signaling inhibitor (Cediranib) and sham treatments in mouse tumors using DCE-MRI, DW-MRI, and histology. Neoplasia. 14:54-64.
- McFarland, B.C., et al (2011). Therapeutic potential of AZD1480 for the treatment oh human glioblastoma. Mol Cancer Ther. 12:2384-93.



