



# Data Sheet

Research Use Only

## Compound Name

Ruxolitinib

## Catalog Number

SM87

## Alternative Names

INCB018424, INCB18424, NCB018424, NCB18424, (3R)-3-(4-(7H-pyrrolo[2,3-d]pyrimidin-4-yl)-1H-pyrazol-1-yl)-3-cyclopentylpropanenitrile

## Activity

Ruxolitinib is a JAK inhibitor of JAK1, JAK2, and JAK3. JAKs, or Janus-associated kinases, are tyrosine kinases found in the cytoplasm that are known to active the signaling of certain growth factor receptors and cytokines.

## Effect

JAK inhibition with ruxolitinib could work as pretreatment for allogeneic stem cell transplantation in myelofibrosis. Ruxolitinib inhibits erythropoiesis from induced pluripotent stem cells (iPSC), but has less inhibitory effect on the self-renewal of CD34+ hematopoietic progenitors.

## Purity

>99%

## CAS

941678-49-5

## Formula

C<sub>17</sub>H<sub>18</sub>N<sub>6</sub>

## Molecular Weight

306.37

## Solubility

DMSO, ethanol

## Stability

Stable at -20°C. Keep away from direct sunlight.

## References

1. Stübig, T., et al. 2014. Leukemia. PMID: 24569777
2. Ye, Z., et al. 2014. Stem Cells. 32(1): 269-278. PMID: 24105986