

DATA SHEET

Product Name: Ruxolitinib

Catalog #: CV-1032

Alt: CAS # 941678-49-5; (3R)-3-cyclopentyl-3-[4-(7H-pyrrolo[2,3-d]pyrimidin-4-yl)pyrazol-1-yl]propanenitrile

Molecular Mass: 306.4

Analysis: >98% (HPLC); NMR (conforms)

Supplied As: White powder

Resuspension: May be dissolved in DMSO (28 mg/ml); or Ethanol (15 mg/ml, warm)

Storage: Store desiccated as supplied at -20°C for up to 2 years. Store solutions at -20°C for up to 3 months.

Description: Potent and selective JAK1&2 inhibitor, IC₅₀s=2.7, 4.5 and 322 nM for JAK1, JAK2 and JAK3 respectively¹. Blocks IL-6 signaling (IC₅₀=281 nM) and proliferation of JAK2^{V617F+} Ba/F3 cells (IC₅₀=127 nM)². Inhibits the proinflammatory secretome of senescent cells³. The JAK1 S646P mutant is highly sensitive to ruxolitinib⁴. Clinically useful anticancer agent.

References:

1. Verstovsek, S., et al., (2009) Hematol. Am. Soc. Hematol. Educ. Program, (1)636
2. Quintas-Cardama, A., et al., (2010) Blood, 115 : 3109
3. Farr, J.N., et al., (2017) Nat. Med., 23 : 1072
4. Li, Q., et al., (2017) Oncotarget, 8 : 34687

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