CP690550

REAGENTS DIRECT

5 mg

For research purposes only

CP690550 is a novel Janus kinase 3 (JAK3) inhibitor. JAK3 is a critical cytoplasmic tyrosine kinase in the signaling pathways of multiple cytokines associated with T cell function. CP690550 is currently in clinical trials for rheumatoid arthritis (RA) and other autoimmune diseases. CP690550 displays greater antiproliferative and pro-apoptotic activity against murine multipotent factor-dependent cell Patersen-erythropoietin receptor (FDCP-EpoR) cells harboring JAK2(V617F) compared with JAK2(WT).

TECHNICAL INFORMATION

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Other Names: Tasocitinib, CP-690550

Chemical Formula: C₁₆H₂₀N₆O

CAS Number: 477600-75-2

Molecular Weight: 312.38

Purity: >98%

Appearance: white solid

Solubility: DMSO

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 DMSO at 100 mg/ml. If precipitate is observed, vortex for 5 minutes. For most cells, the maximum tolerance to DMSO is less than 0.5%.

REFERENCES

- Flanagen et al. (2010) Discovery of CP-690,550: a potent and selective Janus kinase (JAK) inhibitor for the treatment of autoimmune diseases and organ transplant rejection. J Med Chem. 53(24):8468-84.
- West K. (2009) CP-690550, a JAK3 inhibitor as an immunosuppressant for the treatment of rheumatoid arthritis, transplant rejection, psoriasis and other immune-mediated disorders. Curr Opin Investig Drugs. 10 (5):491-504.
- 3. Ju et al. (2011) CP-690,550, a therapeutic agent, inhibits cytokine-mediated Jak3 activation and proliferation of T cells from patients with ATL and HAM/TSP. Blood. 117(6):1938-46.

