

Data Sheet

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Product Name : Tofacitinib
Cat. No. : PC-45816
CAS No. : 477600-75-2
Molecular Formula : C₁₆H₂₀N₆O
Molecular Weight : 312.37
Target : JAK

Biological Activity

Solubility

Tofacitinib (CP-690550) is a potent, specific, orally active inhibitor of **JAK3** with IC50 of 1 nM in cell-free assays. Tofacitinib (CP-690550) displays 20- to 100-fold less potency for JAK2 and JAK1 (IC50=20 nM and 112 nM, respectively), and shows no potent activity against 30 other kinases at >3 uM (CaMK1, ROCK2, Lck, MST2, etc.). Tofacitinib (CP-690550) effectively inhibits a murine mixed lymphocyte reaction (MLR) with IC50 of 91 nM. Tofacitinib (CP-690550) significantly prolonges survival in a murine model of heart transplantation and in cynomolgus monkeys receiving kidney transplants.

References

Changelian PS, et al. *Science*. 2003 Oct 31;302(5646):875-8.

Jiang JK, et al. *J Med Chem*. 2008 Dec 25;51(24):8012-8.

Kudlacz E, et al. Am J Transplant. 2004 Jan;4(1):51-7.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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