



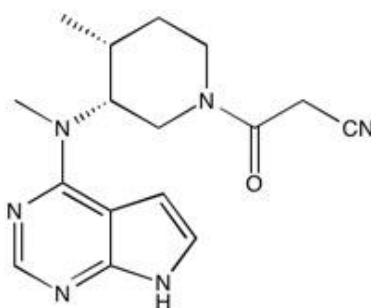
Catalog # 10-2177

Tofacitinib

CAS# 477600-75-2

Tasocitinib, CP-690550

Lot # FBS2034



Potent pan-JAK inhibitor, IC_{50} s=1, 20 and 112 nM for JAK3, JAK2 and JAK1 respectively.¹ Displays potent antiinflammatory² and immunosuppressant³ activity. Promotes a white-to-brown metabolic conversion in human adipocytes.⁴ In therapeutic use for rheumatoid arthritis.⁵

- 1) Jiang *et al.* (2008), *Examining the chirality, confirmation and selective kinase inhibition of 3-((3R,4R)-4-methyl-3-(methyl(7H-pyrrolo[2,3-d]pyrimidin-4-yl)amino)piperidin-1-yl)-3-oxopropanenitril (CP-690,550)*; J. Mol. Chem., 51 8012
- 2) Cutolo and Meroni (2013), *Clinical utility of the oral JAK inhibitor tofacitinib in the treatment of rheumatoid arthritis*; J. Inflamm. Res., 6 129
- 3) Martina *et al.* (2016), *Inhiition of JAK3 and PKC via Immunosuppressive Drugs Tofacitinib and Sotrastaurin Inhibits Proliferation of Human B Lymphocytes In Vitro*; Transplant. Proc., 48 3046
- 4) Moisan *et al.* (2015), *White-to-brown metabolic conversion of human adipocytes by JAK inhibition*; Nat. Cell Biol., 17 57
- 5) Dowty *et al.* (2014), *Preclinical to clinical translation of tofacitinib, a Janus kinase inhibitor, in rheumatoid arthritis*; J. Pharmacol. Exp. Ther., 348 165

PHYSICAL DATA

Molecular Weight:	312.37
Molecular Formula:	C ₁₆ H ₂₀ N ₆ O
Purity:	99% by HPLC and TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 100 mg/ml) or Ethanol (up to 100 mg/ml)
Physical Description:	Off-white solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

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