

Product Name : Tofacitinib

Synonyms : CP-690550

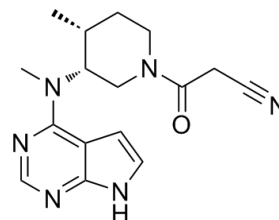
Cat No. : M14592

CAS Number : 477600-75-2

Molecular Formula : C₁₆H₂₀N₆O

Formula Weight : 312.37

Chemical Name : 1-Piperidinepropanenitrile, 4-methyl-3-(methyl-7H-pyrrolo[2,3-d]pyrimidin-4-ylamino)-.beta.-oxo-, (3R,4R)-



Description : Tofacitinib (CP-690550) is a potent, specific, orally active inhibitor of JAK3 with IC₅₀ of 1 nM in cell-free assays; 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.); effectively inhibits a murine mixed lymphocyte reaction (MLR) with IC₅₀ of 91 nM, significantly prolongs survival in a murine model of heart transplantation and in cynomolgus monkeys receiving kidney transplants. Rheumatoid Arthritis Approved

Pathway : Angiogenesis

Target : JAK

Receptor : JAK1;JAK2;JAK3;Lck;ROCK2

Solubility : DMSO

SMILES : C[C@@H]1CCN(C[C@@H]1N(C)C2=NC=NC3=C2C=CN3)C(=O)CC#N

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1. Changelian PS, et al. Science. 2003 Oct 31;302(5646):875-8. | 2. Jiang JK, et al. J Med Chem. 2008 Dec 25;51(24):8012-8. | 3. Kudlacz E, et al. Am J Transplant. 2004 Jan;4(1):51-7.