



Product Information

Product ID T5720

CAS No. 540737-29-9

Chemical Name 3-[(3R,4R)-4-methyl-3-[methyl(7H-pyrrolo[2,3-d]pyrimidin-4-yl)amino]piperidin-1-yl]-3-oxopropanenitrile citrate salt

Synonym CP-690550-10, Tasocitinib citrate salt

Formula $C_{16}H_{20}N_6O \cdot C_6H_8O_7$

Formula Wt. 504.49

Melting Point

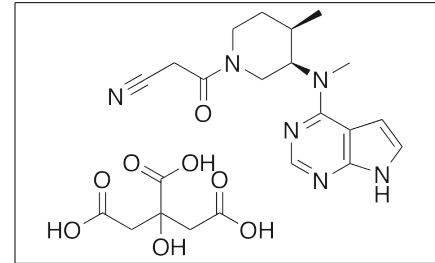
Purity $\geq 99\%$

Solubility Soluble in DMSO (100 mg/ml at 25 °C), ethanol (<1 mg/ml at 25 °C), DMF (~5 mg/ml), water (<1 mg/ml at 25 °C), and 0.5% methylcellulose (30 mg/ml at 25 °C)

Store Temp Ambient

Ship Temp Ambient

Description Tofacitinib is an inhibitor of JAK1/2/3 that is clinically used to treat myelofibrosis and rheumatoid arthritis. Tofacitinib exhibits immunosuppressive, anti-inflammatory, and antiviral activities. In vitro, tofacitinib inhibits production of inflammatory cytokines, Th2 cell differentiation, Th17 cell differentiation, and activation of STAT1, which in turn prevents induction of T-bet and generation of Th1 cells. In other cellular models, tofacitinib inhibits HIV replication and reactivation of latent HIV-1.



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
T5720	5 mg	\$89.10
T5720	25 mg	\$382.20
T5720	100 mg	\$1401.50

References Gavegnano C, Detorio M, Montero C, et al. Ruxolitinib and Tofacitinib are Potent and Selective Inhibitors of HIV-1 Replication and Virus Reactivation in Vitro. *Antimicrob Agents Chemother.* 2014 Jan 13. [Epub ahead of print]. PMID: 24419350.

Yamaoka K, Tanaka Y. Targeting the Janus kinases in rheumatoid arthritis: focus on tofacitinib. *Expert Opin Pharmacother.* 2014 Jan;15(1):103-13. PMID: 4188100.

Tak PP, Kalden JR. Advances in rheumatology: new targeted therapeutics. *Arthritis Res Ther.* 2011 May 25;13 Suppl 1:S5. PMID: 21624184.

Ghoreschi K, Jesson MI, Li X, et al. Modulation of innate and adaptive immune responses by tofacitinib (CP-690,550). *J Immunol.* 2011 Apr 1;186(7):4234-43. PMID: 21383241.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.