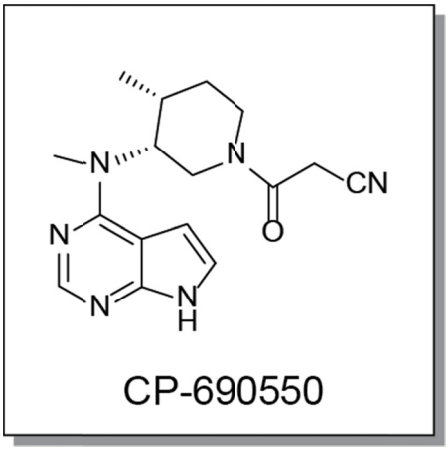
Product Specification Sheet

Product Name: CP-690550

Catalog Number: C2716-2 (powder)
C2716-2s (10 mM in DMSO)

Package Size: 2 mg



CP-690550

Technical information:

Chemical Formula:	$C_{16}H_{20}N_6O$
CAS #:	477600-75-2
Molecular Weight:	312.38
Purity:	>98%
Formulation:	white solid
Solubility:	Soluble in DMSO up to 100 mM
Chemical Name:	3-((3R,4R)-4-methyl-3-(methyl(7H-pyrrolo[2,3-d]pyrimidin-4-yl)amino)piperidin-1-yl)-3-oxopropanenitrile
Storage:	Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.

Handling:

- For C2716-2 (powder), add 640 uL of DMSO to make 10 mM solution.
- For C2716-2s, before open the vial, centrifuge the vial at 500rpm x 1 min in a 50 mL conical tube to ensure full recovery of sample.

Biological Activity: CP-690,550 is a potent and selective JAK inhibitor currently in clinical trials for rheumatoid arthritis (RA) and other autoimmune disease indications. In enzyme assays it potently inhibited recombinant human kinase protein JAK1 (IC_{50}=3.2nM), JAK2 (IC_{50}=4.1nM) and JAK3 (IC_{50}=1.6nM), but in cellular assays it potently inhibited signaling through JAK1 and JAK3 with 5-100 fold selectivity over JAK2.

Reference:

1. Meyer DM, et al. Anti-inflammatory activity and neutrophil reductions mediated by the JAK1/JAK3 inhibitor, CP-690,550, in rat adjuvant-induced arthritis. J Inflamm (Lond). 2010 11;7:41.
2. Flanagan ME, et al. 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. 2010 53(24):8468-84

For Technical Support: technical@cellagentech.com

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