



Recombinant Mouse Tyrosine-protein kinase JAK3 (Jak3), partial

Product Code	CSB-EP717252MO
Relevance	Non-receptor tyrosine kinase involved in various processes such as cell growth, development, or differentiation. Mediates essential signaling events in both innate and adaptive immunity and plays a crucial role in hematopoiesis during T-cells development. In the cytoplasm, plays a pivotal role in signal transduction via its association with type I receptors sharing the common subunit gamma such as IL2R, IL4R, IL7R, IL9R, IL15R and IL21R. Following ligand binding to cell surface receptors, phosphorylates specific tyrosine residues on the Cytoplasmic domain tails of the receptor, creating docking sites for STATs proteins. Subsequently, phosphorylates the STATs proteins once they are recruited to the receptor. Phosphorylated STATs then form homodimer or heterodimers and translocate to the nucleus to activate gene transcription. For example, upon IL2R activation by IL2, JAK1 and JAK3 molecules bind to IL2R beta (IL2RB) and gamma chain (IL2RG) subunits inducing the tyrosine phosphorylation of both receptor subunits on their Cytoplasmic domain. Then, STAT5A AND STAT5B are recruited, phosphorylated and activated by JAK1 and JAK3. Once activated, dimerized STAT5 translocates to the nucleus and promotes the transcription of specific target genes in a cytokine-specific fashion.
Abbreviation	Recombinant Mouse Jak3 protein, partial
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q62137
Alias	Janus kinase 3 ;JAK-3
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	≥ 90% as determined by SDS-PAGE.
Sequence	LKYISLLGKGNFGSVELCRYDPLGDNTGPLVAVKQLQHSGPDQQRDFQREIQI LKALHSDFIVKYRGVSYGPRQSLRLVMEYLPSCGLRDFLQRHRARLHTDRLL LFAWQICKGMEYLGARRCVHRDLAARNILVESEAHVKIADFGLAKLLPLGKDYY VVREPGQSPIFWYAPESLSDNIFSRQSDVWSFGVVLYELFTYCDKSCSPSAEF LRMMGPeregppLCRLLELLAEGRRLLPPPPTCPTEVQELMQLCWAPSPHDP AFGTLSPQLDALWRGRPG
Research Area	Others
Source	E.coli
Target Names	Jak3
Expression Region	818-1100aa



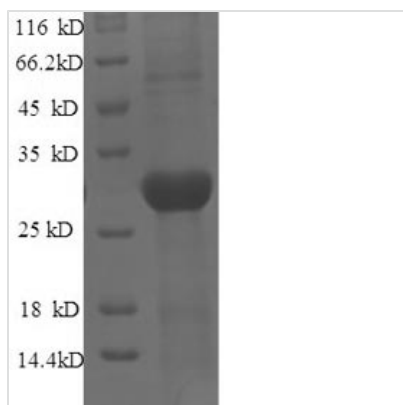
Notes Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Tag Info N-terminal 6xHis-tagged

Mol. Weight 36.2kDa

Protein Length Partial

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.