



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

Product Code	CSB-YP717252MO
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	Jak3
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
Storage Buffer	Tris-based buffer,50% glycerol
Alias	Janus kinase 3 ;JAK-3
Product Type	Recombinant Protein
Species	Mus musculus (Mouse)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	LKYISLLGKGNFGSVELCRYDPLGDNTGPLVAVKQLQHSGPDQQRDFQREIQI LKALHSDFIVKYRGVSYGPGRQSLRLVMEYLPSCGLRDFLQRHRARLHTDRLL LFAWQICKGMEYLGARRCVHRDLAARNILVESEAHVKIADFGGLAKLLPLGKDYY VVREPGQSPIFWYAPESLSDNIFSRQSDVWSFGVVLVELFTYCDKSCSPSAEF LRMMGPEREPPPLCRILLELLAEGRRLLPPPTCPTEVQELMQLCWAPSPHGRP AFGTLSPQLDALWRGRPG
Source	Yeast
Gene Names	Jak3
Protein Names	Recommended name: Tyrosine-protein kinase JAK3 EC= 2.7.10.2Alternative

name(s): Janus kinase 3 Short name= JAK-3

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

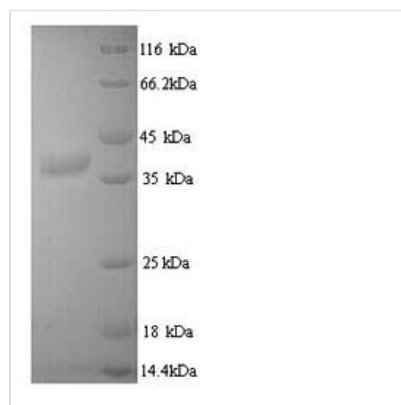
N-terminal 6xHis-tagged

Mol. Weight

34.2kDa

Protein Description

Partial

Image


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