JAK3 Blocking Peptide – The purity is >90%,tested by HPLC and MS. Purity

PRODUCT OVERVIEW

Product Name	JAK3, Blocking Peptide
Full Product Name	JAK3 Blocking Peptide
Product Gene Name	JAK3 blocking peptide
Product Synonym Names	EC 2.7.10.2; JAK 3; JAK L; JAK-3; Jak3; JAK3 HUMAN; JAK3_HUMAN; JAKL; Janus kinase 3 (a protein tyrosine kinase, leukocyte); Janus kinase 3; Janus Kinase3; L JAK; L-JAK; Leukocyte janus kinase; LJAK; Protein tyrosine kinase leukocyte; Tyrosine protein kinase JAK3; Tyrosine-protein kinase JAK3
Form/Format	Synthetic peptide was lyophilized with 100% acetonitrile and is supplied as a powder. Reconstitute with 0.1 ml DI water for a final concentration of 10 mg/ml.
Purity/Purification	The purity is >90%,tested by HPLC and MS.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C.
Antibody/Peptide Pairs	JAK3 peptide (MBS9614548) is used for blocking the activity of JAK3 antibody (MBS9612538)
Molecular Weight	125,099 Da
Chromosome Location	Chromosome: 19; NC_000019.9 (17935591..17958841, complement). Location: 19p13.1
OMIM	600173
Supply Chain Verification	Manufactured in a lab with traceable raw materials manufactured on site. Coordinated product portfolio of antibodies, pairs, conjugates, recombinant proteins, and immunoassay materials available, please inquire.
Notes	For phospho antibody, we provide phospho peptide (0.5mg) and non-phospho peptide (0.5mg)
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for JAK3 blocking peptide	Blocking/Control
Related Product Information for JAK3 blocking peptide	Blocking peptides are peptides that bind specifically to the target antibody and block antibody binding. These peptide usually contains the epitope recognized by the antibody. Antibodies bound to the blocking peptide no longer bind to the epitope on the target protein. This mechanism is useful when non-specific binding is an issue, for example, in Western blotting (immunoblot) and immunohistochemistry (IHC). By comparing the staining from the blocked antibody versus the antibody alone, one can see which staining is specific; Specific binding will be absent from the western blot or immunostaining performed with the neutralized antibody.
Other Notes	Small volumes of JAK3 blocking peptide vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for JAK3 purchase	MBS9614548 is a blocking peptide targeting JAK3.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for JAK3. It may not necessarily be applicable to this product.

NCBI GI #	47157315
NCBI GeneID	3718
NCBI Accession #	NP_000206.2
UniProt Primary Accession #	P52333

UniProt Secondary Accession #	Q13259; Q13260; Q13611; Q99699; Q9Y6S2
UniProt Related Accession #	P52333
GenBank Nucleotide #	NM_000215.3
NCBI Official Full Name	tyrosine-protein kinase JAK3
NCBI Official Synonym Full Names	Janus kinase 3
NCBI Official Symbol	JAK3
NCBI Official Synonym Symbols	JAKL; LJAK; JAK-3; L-JAK; JAK3_HUMAN
UniProt Protein Name	Tyrosine-protein kinase JAK3
UniProt Synonym Protein Names	Janus kinase 3; JAK-3; Leukocyte janus kinase
Protein Family	Tyrosine-protein kinase
UniProt Gene Name	JAK3
UniProt Synonym Gene Names	JAK-3; L-JAK
UniProt Entry Name	JAK3_HUMAN
NCBI Protein Information	tyrosine-protein kinase JAK3; leukocyte Janus kinase; Janus kinase 3 (a protein tyrosine kinase, leukocyte)
NCBI Summary for JAK3	The protein encoded by this gene is a member of the Janus kinase (JAK) family of tyrosine kinases involved in cytokine receptor-mediated intracellular signal transduction. It is predominantly expressed in immune cells and transduces a signal in response to its activation via tyrosine phosphorylation by interleukin receptors. Mutations in this gene are associated with autosomal SCID (severe combined immunodeficiency disease). [provided by RefSeq, Jul 2008]
UniProt Comments for JAK3	JAK3: a non-receptor tyrosine-kinase of the Jak family expressed predominantly in immune cells. Mediates signal transduction via the common gamma-chain of cytokine receptors, including IL-2, -4, -7, -9, and -15. Interacts with members of the STAT (signal transduction and activators of transcription) family. Interacts with STAM2 and SHB. Contains two protein kinase domains. Mutations that abrogate JAK3 function cause an autosomal SCID (severe combined immunodeficiency disease). Inhibitor: R017s for organ transplants. Three differentially spliced isoforms have been described. Protein type: Protein kinase, tyrosine (non-receptor); Protein kinase, TK; Kinase, protein; EC 2.7.10.2; TK group; JakA family Chromosomal Location of Human Ortholog: 19p13.1 Cellular Component: extrinsic to internal side of plasma membrane; cytoskeleton; endomembrane system; cytosol Molecular Function: protein binding; protein-tyrosine kinase activity; non-membrane spanning protein tyrosine kinase activity; protein phosphatase binding; ATP binding; hormone receptor binding Biological Process: negative regulation of interleukin-12 production; cell migration; peptidyl-tyrosine phosphorylation; negative regulation of T-helper 1 cell differentiation; negative regulation of interleukin-10 production; negative regulation of FasL biosynthetic process; protein amino acid phosphorylation; enzyme linked receptor protein signaling pathway; regulation of apoptosis; negative regulation of dendritic cell cytokine production; tyrosine phosphorylation of STAT protein; B cell differentiation; innate immune response; erythrocyte differentiation; positive regulation of T cell proliferation; T cell homeostasis; positive regulation of transcription from RNA polymerase II promoter; inflammatory response; negative regulation of T cell activation; transmembrane receptor protein tyrosine kinase signaling pathway; STAT protein nuclear translocation Disease: Severe Combined Immunodeficiency, Autosomal Recessive, T Cell-negative, B Cell-positive, Nk Cell-negative
Research Articles on JAK3	**1.** analysis of the JAK-Fes-phospholipase D signaling pathway that is enhanced in highly proliferative breast cancer cells

Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/blocking-peptide/jak3/9614548