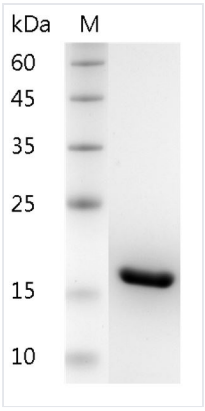
IL-1alpha Human Recombinant Protein

PRODUCT OVERVIEW

Product Name	IL-1alpha, Recombinant Protein
Full Product Name	Human IL-1alpha Protein, His tag (Animal-Free)
Product Gene Name	IL-1alpha recombinant protein
Product Synonym Names	IL-1alpha; IL 1alpha; Lymphocyte-Activating Factor (LAF); Endogenous Pyrogen (EP); Leukocyte; Hematopoietin-1; Lymphocyte-Activating Factor (LAF); Endogenous Pyrogen (EP); Leukocyte
Sequence	Ser113-Ala 271
Host	E coli
Form/Format	Lyophilized from sterile PBS, pH 8.0.
Purity/Purification	>98 % as determined by SDS-PAGE
Preparation and Storage	Lyophilized protein product should be stored desiccated below -18 degree C. Upon reconstitution, the protein should be stored at 4 degree C between 2-7 days and for future use below -18 degree C. For long term storage it is recommended to add a carrier protein (5% HSA,10% FBS or 0.1%BSA). Please prevent freeze-thaw cycles. Shipping: Gel pack with blue ice.
Molecular Weight	30,607 Da
Sequence Positions	159aa
Chromosome Location	Chromosome: 2; NC_000002.11 (113531492..113542971, complement). Location: 2q14
OMIM	147760
3D Structure	ModBase 3D Structure for P01583
Species	Human
Tag	His tag
Endotoxin	<0.1 EU per ug of the protein as determined by the LAL method.
Activity	Measure by its ability to induce D10.G4.1 cells proliferation.The ED?? for this effect is <10 pg/mL.The specific activity of recombinant human IL-1 alpha is approximately >1 x10? IU/ mg.
Protein Construction	The recombinant Human IL-1alpha Protein consists of 159 amino acids and predicts a molecular mass of 19kDa. Amino acid sequence derived from Human IL-1alpha (Ser113-Ala271)(P01583) was expressed with 6×His tag at the C-terminus.
Usage Notes	Always centrifuge tubes before opening. It is recommended to reconstitute the lyophilized recombinant protein to a concentration of 0.1-1mg/mL using the buffer we provided, and keep at room temperature for at least 20 min to fully dissolve. Please avoid vortex vigorously.
Product Categories/Family for IL-1alpha recombinant protein	Cytokines and proteins
Related Product Information for IL-1alpha recombinant protein	Interleukin-1 alpha (IL1 alpha or IL1alpha) is a member of the interleukin-1 cytokine family, found constitutively present in epithelial layers of the entire gastrointestinal tract, lung, liver, kidney, endothelial cells, and astrocytes. The synthesized IL-1 alpha is a 31 kDa inactive precursor and can be cleaved by intracellular caspase-1 or extracellular proteases to generate the bioactive 17 kDa form and the 16 kDa N-terminal cleavage product. Both precursor and mature IL-1 alpha protein bind to the IL-1 receptor (IL-1R), initiating a cascade of inflammatory cytokines and chemokines production such as IL-6, IL-8, and TNF, in response to viral and bacterial pathogens conditions. IL-1 alpha plays a central role in immune-surveillance mechanisms, stimulating macrophages, neutrophils, and CD8+ T cells activity.

Other Notes	Small volumes of IL-1alpha recombinant protein 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 IL-1alpha purchase	MBS9719726 is a recombinant protein targeting IL-1alpha. Also known as Human IL-1alpha Protein, His tag (Animal-Free). Host: E coli.



Testing Data of IL-1alpha recombinant protein

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for IL-1alpha. It may not necessarily be applicable to this product.

NCBI GI #	27894330
NCBI GeneID	3552
NCBI Accession #	NP_000566.3
UniProt Primary Accession #	P01583
UniProt Secondary Accession #	Q53QF9; Q7RU02
UniProt Related Accession #	P01583
GenBank Nucleotide #	NM_000575.3
NCBI Official Full Name	interleukin-1 alpha proprotein
NCBI Official Synonym Full Names	interleukin 1, alpha
NCBI Official Symbol	IL1A
NCBI Official Synonym Symbols	IL1; IL-1A; IL1F1; IL1-ALPHA
UniProt Protein Name	Interleukin-1 alpha
UniProt Synonym Protein Names	Hematopoietin-1
Protein Family	Gamma-secretase
UniProt Gene Name	IL1A
UniProt Synonym Gene Names	IL1F1; IL-1 alpha
UniProt Entry Name	IL1A_HUMAN
NCBI Protein Information	interleukin-1 alpha; IL-1 alpha; hematopoietin-1; preinterleukin 1 alpha; pro-interleukin-1-alpha

NCBI Summary for IL-1alpha	The protein encoded by this gene is a member of the interleukin 1 cytokine family. This cytokine is a pleiotropic cytokine involved in various immune responses, inflammatory processes, and hematopoiesis. This cytokine is produced by monocytes and macrophages as a proprotein, which is proteolytically processed and released in response to cell injury, and thus induces apoptosis. This gene and eight other interleukin 1 family genes form a cytokine gene cluster on chromosome 2. It has been suggested that the polymorphism of these genes is associated with rheumatoid arthritis and Alzheimer's disease. [provided by RefSeq, Jul 2008]
UniProt Comments for IL-1alpha	IL1A: Produced by activated macrophages, IL-1 stimulates thymocyte proliferation by inducing IL-2 release, B-cell maturation and proliferation, and fibroblast growth factor activity. IL-1 proteins are involved in the inflammatory response, being identified as endogenous pyrogens, and are reported to stimulate the release of prostaglandin and collagenase from synovial cells. Belongs to the IL-1 family. Protein type: Motility/polarity/chemotaxis; Cytokine Chromosomal Location of Human Ortholog: 2q14 Cellular Component: extracellular space; extracellular region; cytosol Molecular Function: protein binding; interleukin-1 receptor binding; copper ion binding; cytokine activity Biological Process: positive regulation of I-kappaB kinase/NF-kappaB cascade; positive regulation of mitosis; apoptosis; positive regulation of interleukin-2 biosynthetic process; cytokine and chemokine mediated signaling pathway; germ cell programmed cell death; positive regulation of JNK cascade; fever; negative regulation of cell proliferation; cell proliferation; connective tissue replacement during inflammatory response; positive regulation of angiogenesis; response to copper ion; positive regulation of transcription from RNA polymerase II promoter; immune response; inflammatory response; positive regulation of cytokine secretion
Research Articles on IL-1alpha	**1.** This meta-analysis/review suggests that IL-1A is a candidate gene for Alzheimer's disease susceptibility.
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/recombinant-protein/il-1alpha/9719726