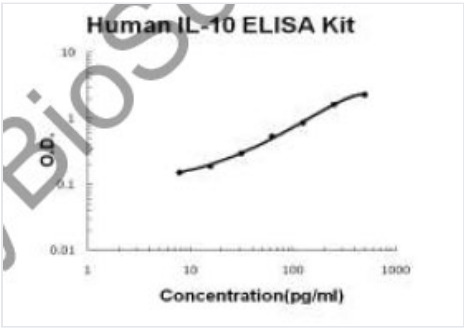
Il-10 (IL10) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	IL-10 (IL10), ELISA Kit
Full Product Name	Human IL-10 PicoKine ELISA Kit
Product Gene Name	IL10 elisa kit
Product Synonym Names	Interleukin-10; interleukin 10; CSIF; Cytokine synthesis inhibitory factor; GVHDS; IL 10; IL-10; IL10; IL10_HUMAN; IL10A; Interleukin 10; Interleukin-10; Interleukin10; MGC126450; MGC126451; T cell growth inhibitory factor; TGIF
Species Reactivity	Human
Samples	Cell Culture Supernates, Serum And Plasma (Heparin, Edta, Citrate)
Detection Range	0.624ng/ml-40ng/ml
Sensitivity	<0.05ng/ml
Specificity	Natural and recombinant Human HSPG2
Preparation and Storage	Store at 4 degree C for 6 months, at -20 degree C for 12 months. Avoid multiple freeze-thaw cycles (Shipped with wet ice.)
Inter-assay Precision	Inter-Assay Precision (Precision accross assays):Three samples of known concentration were tested in separate assays to assess inter-assay precision.
Intra-assay Precision	Intra-Assay Precision (Precision within an assay): Three samples of known concentration were tested on one plate to assess intra-assay precision
Molecular Weight	20,517 Da
OMIM	gene 614395
3D Structure	ModBase 3D Structure for P22301
Production Time	Due to severe delay and raw materials shortage, production time may takes between 5-8 weeks.
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Related Product Information for IL10 elisa kit	Principle of the Assay: The Picokine Human HSPG2 Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid phase immunoassay specially designed to measure Human HSPG2 with a 96-well strip plate that is pre-coated with antibody specific for HSPG2. The detection antibody is a biotinylated antibody specific for HSPG2. The capture antibody is A monoclonal antibody from mouse, the detection antibody is a biotinylated detection polyclonal antibody from goat. The kit contains recombinant Human HSPG2 with immunogen: Expression system for standard: NSO, Immunogen sequence: E3687-S4391. The kit is analytically validated with ready to use reagents. To measure Human HSPG2, add standards and samples to the wells, then add the biotinylated detection antibody. Wash the wells with PBS or TBS buffer, and add Avidin-Biotin-Peroxidase Complex (ABC-HRP). Wash away the unbounded ABC-HRP with PBS or TBS buffer and add TMB. TMB is substrate to HRP and will be catalyzed to produce a blue color product, which changes into yellow after adding acidic stop solution. The density of the yellow product is linearly propotional to Human HSPG2 in the sample. Read the density of the yellow product in each well using a plate reader, and benchmark the sample wells' readings against the standard curve to determine the concentration of Human HSPG2 in the sample!!Background/Introduction: Perlecan (PLC) also known as HSPG2, is a protein that in humans is encoded by the HSPG2 gene. It is mapped to 1p36.12. Perlecan is highly conserved across species and the available data indicate that it has evolved from ancient ancestors by gene duplication and exonshuffling. Perlecan is a key component of the vascular extracellular matrix, here it interacts with a variety of other matrix components and helps to maintain the endothelial barrier function. It is a potent inhibitor of smooth muscle cell proliferation and is thus thought to help maintain vascular homeostasis. Perlecan can also promote growth factor (e.g., FGF2) activity and thus stimulate endothelial growth and re-generation.

Other Notes	Small volumes of IL10 elisa kit 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 IL10 purchase	MBS175968 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the IL-10 (IL10) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing IL10. The ELISA analytical biochemical technique of the MBS175968 kit is based on IL10 antibody-IL10 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect IL10 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, IL10. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Testing Data/Standard Curve (for reference only) of IL10 elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for IL10. It may not necessarily be applicable to this product.

NCBI GI #	124292
NCBI GeneID	3586
NCBI Accession #	P22301.1
UniProt Primary Accession #	P22301
UniProt Related Accession #	P22301
NCBI Official Full Name	Interleukin-10
NCBI Official Synonym Full Names	interleukin 10
NCBI Official Symbol	IL10
NCBI Official Synonym Symbols	CSIF; TGIF; GVHDS; IL-10; IL10A
UniProt Protein Name	Interleukin-10
UniProt Synonym Protein Names	Cytokine synthesis inhibitory factor; CSIF
Protein Family	Interleukin
UniProt Gene Name	IL10
UniProt Synonym Gene Names	IL-10; CSIF
UniProt Entry Name	IL10_HUMAN
NCBI Protein Information	interleukin-10; T-cell growth inhibitory factor; cytokine synthesis inhibitory factor

NCBI Summary for IL10	The protein encoded by this gene is a cytokine produced primarily by monocytes and to a lesser extent by lymphocytes. This cytokine has pleiotropic effects in immunoregulation and inflammation. It down-regulates the expression of Th1 cytokines, MHC class II Ags, and costimulatory molecules on macrophages. It also enhances B cell survival, proliferation, and antibody production. This cytokine can block NF-kappa B activity, and is involved in the regulation of the JAK-STAT signaling pathway. Knockout studies in mice suggested the function of this cytokine as an essential immunoregulator in the intestinal tract. Mutations in this gene are associated with an increased susceptibility to HIV-1 infection and rheumatoid arthritis.[provided by RefSeq, May 2011]
UniProt Comments for IL10	IL10: Inhibits the synthesis of a number of cytokines, including IFN-gamma, IL-2, IL-3, TNF and GM-CSF produced by activated macrophages and by helper T-cells. Belongs to the IL-10 family. Protein type: Motility/polarity/chemotaxis; Cytokine; Secreted, signal peptide; Secreted Chromosomal Location of Human Ortholog: 1q31-q32 Cellular Component: extracellular space Molecular Function: growth factor activity; cytokine activity; interleukin-10 receptor binding Biological Process: B cell proliferation; negative regulation of chronic inflammatory response to antigenic stimulus; regulation of isotype switching; positive regulation of transcription, DNA-dependent; leukocyte chemotaxis; response to glucocorticoid stimulus; positive regulation of JAK-STAT cascade; negative regulation of B cell proliferation; negative regulation of membrane protein ectodomain proteolysis; response to insulin stimulus; negative regulation of interferon-alpha biosynthetic process; negative regulation of T cell proliferation; cytoplasmic sequestering of NF-kappaB; cell-cell signaling; positive regulation of MHC class II biosynthetic process; negative regulation of interferon-gamma production; response to molecule of bacterial origin; negative regulation of interleukin-6 production; hemopoiesis; negative regulation of tumor necrosis factor biosynthetic process; inflammatory response; aging; response to drug; response to inactivity; negative regulation of interleukin-12 production; positive regulation of B cell apoptosis; T-helper 2 type immune response; negative regulation of myeloid dendritic cell activation; negative regulation of nitric oxide biosynthetic process; negative regulation of cytokine secretion during immune response; regulation of gene expression; B cell differentiation; defense response to bacterium; negative regulation of MHC class II biosynthetic process; positive regulation of transcription from RNA polymerase II promoter; positive regulation of transcription factor activity; receptor biosynthetic process; response to activity; regulation of sensory perception of pain; negative regulation of apoptosis; positive regulation of cytokine secretion Disease: Graft-versus-host Disease, Susceptibility To; Rheumatoid Arthritis; Human Immunodeficiency Virus Type 1, Susceptibility To
Research Articles on IL10	**1.** Results show an opposing relationship between Roquin-1 and the IL-17a proinflammatory cytokine. Enforced expression of Rc3h1 restricts Il17a expression, and exposure of T cells to IL-10 increases Rc3h1 expression.
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