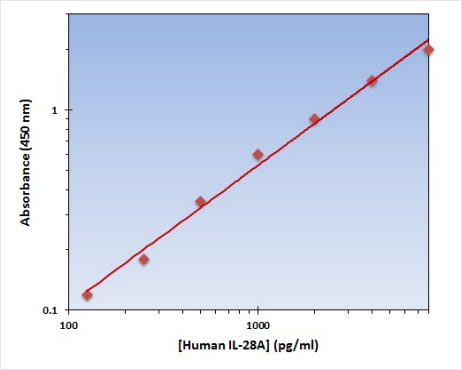
Il-28a ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	IL-28A, ELISA Kit
Full Product Name	IL-28A (Human) OmniKine ELISA Kit
Product Gene Name	IL-28A elisa kit
Product Synonym Gene Name	IL28A
Product Synonym Names	Interleukin-28A; Cytokine Zcyto20; Interferon lambda-2
Species Reactivity	Human
Assay Type	Quantitative Sandwich
Form/Format	12 x 8-Well Microstrips
Specificity	The OmniKine™ Human IL-28A ELISA is capable of recognizing both recombinant and naturally produced Human IL-28A proteins. The antigens listed below were tested at 50 ng/ml and did not exhibit significant cross reactivity or interference.
Preparation and Storage	Store entire kit at 4 degree C until use.
Molecular Weight	22,288 Da
OMIM	AY129148 mRNA
3D Structure	ModBase 3D Structure for Q8IZJ0

Related Product Information for IL-28A elisa kit	Principle of the Assay: The OmniKine™ Human IL-28A ELISA Kit contains the components necessary for quantitative determination of natural or recombinant Human IL-28A concentrations within any experimental sample including cell lysates, serum and plasma. This particular immunoassay utilizes the quantitative technique of a "Sandwich" Enzyme-Linked Immunosorbent Assay (ELISA) where the target protein (antigen) is bound in a "sandwich" format by the primary capture antibodies coated to each well-bottom and the secondary detection antibodies added subsequently by the investigator. The capture antibodies coated to the bottom of each well are specific for a particular epitope on Human IL-28A while the user-added detection antibodies bind to epitopes on the captured target protein. Amid each step of the procedure, a series of wash steps must be performed to ensure the elimination of non-specific binding between proteins to other proteins or to the solid phase. After incubation and "sandwiching" of the target antigen, a peroxidase enzyme is conjugated to the constant heavy chain of the secondary antibody (either covalently or via Avidin/Streptavidin-Biotin interactions), allowing for a colorimetric reaction to ensue upon substrate addition. When the substrate TMB (3, 3', 5, 5'-Tetramethylbenzidine) is added, the reaction catalyzed by peroxidase yields a blue color that is representative of the antigen concentration. Upon sufficient color development, the reaction can be terminated through addition of Stop Solution (2 N Sulfuric Acid) where the color of the solution will turn yellow. The absorbance of each well can then be read by a spectrophotometer, allowing for generation of a standard curve and subsequent determination of protein concentration. Background/Introduction: The OmniKine™ Human IL-27 ELISA Kit contains the components necessary for quantitative determination of natural or recombinant Human IL-27 concentrations within any experimental sample including cell lysates, serum and plasma. This particular immunoassay utilizes the quantitative technique of a "Sandwich" Enzyme-Linked Immunosorbent Assay (ELISA) where the target protein (antigen) is bound in a "sandwich" format by the primary capture antibodies coated to each well-bottom and the secondary detection antibodies added subsequently by the investigator. The capture antibodies coated to the bottom of each well are specific for a particular epitope on Human IL-27 while the user-added detection antibodies bind to epitopes on the captured target protein. Amid each step of the procedure, a series of wash steps must be performed to ensure the elimination of non-specific binding between proteins to other proteins or to the solid phase. After incubation and "sandwiching" of the target antigen, a peroxidase enzyme is conjugated to the constant heavy chain of the secondary antibody (either covalently or via Avidin/Streptavidin-Biotin interactions), allowing for a colorimetric reaction to ensue upon substrate addition. When the substrate TMB (3, 3', 5, 5'-Tetramethylbenzidine) is added, the reaction catalyzed by peroxidase yields a blue color that is representative of the antigen concentration. Upon sufficient color development, the reaction can be terminated through addition of Stop Solution (2 N Sulfuric Acid) where the color of the solution will turn yellow. The absorbance of each well can then be read by a spectrophotometer, allowing for generation of a standard curve and subsequent determination of protein concentration.
Other Notes	Small volumes of IL-28A 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 IL-28A purchase	MBS9501972 is a ready-to-use microwell, strip-or-full plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the IL-28A, 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 IL-28A. The ELISA analytical biochemical technique of the MBS9501972 kit is based on IL-28A antibody-IL-28A antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect IL-28A antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, IL-28A. 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(%).



Testing Data of IL-28A elisa kit
The OmniKine Human IL-28A ELISA Kit allows for the detection and quantification of endogenous levels of natural and/or recombinant Human IL-28A proteins within the range of 125-8000 pg/ml.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for IL-28A. It may not necessarily be applicable to this product.

NCBI GI #	26024321
NCBI GeneID	282616
NCBI Accession #	NP_742150.1
UniProt Primary Accession #	Q8IZJ0
UniProt Secondary Accession #	Q45KQ8; Q6VN55; Q8IWL7
UniProt Related Accession #	Q8IZJ0
GenBank Nucleotide #	NM_172138.1
NCBI Official Full Name	interferon lambda-2
NCBI Official Synonym Full Names	interferon lambda 2
NCBI Official Symbol	IFNL2
NCBI Official Synonym Symbols	IL28A; IL-28A
UniProt Protein Name	Interferon lambda-2
UniProt Synonym Protein Names	Cytokine Zcyto20; Interleukin-28A; IL-28A
Protein Family	Interferon
UniProt Gene Name	IFNL2
UniProt Synonym Gene Names	IL28A; ZCYTO20; IFN-lambda-2; IL-28A
NCBI Protein Information	interferon lambda-2
NCBI Summary for IL-28A	This gene encodes a cytokine distantly related to type I interferons and the IL-10 family. This gene, interleukin 28B (IL28B), and interleukin 29 (IL29) are three closely related cytokine genes that form a cytokine gene cluster on a chromosomal region mapped to 19q13. Expression of the cytokines encoded by the three genes can be induced by viral infection. All three cytokines have been shown to interact with a heterodimeric class II cytokine receptor that consists of interleukin 10 receptor, beta (IL10RB) and interleukin 28 receptor, alpha (IL28RA). [provided by RefSeq, Jul 2008]

UniProt Comments for IL-28A	IL28A: Cytokine with immunomodulatory activity. Up-regulates MHC class I antigen expression. Displays potent antiviral activity. Also displays antitumor activity. Ligand for the heterodimeric class II cytokine receptor composed of IL10RB and IL28RA. The ligand/receptor complex seems to signal through the Jak-STAT pathway. Belongs to the IL-28/IL-29 family. Protein type: Cytokine; Secreted; Secreted, signal peptide Chromosomal Location of Human Ortholog: 19q13.2 Cellular Component: extracellular space; intracellular Molecular Function: cytokine activity; receptor binding Biological Process: defense response to virus; innate immune response; JAK-STAT cascade; mucosal immune response; positive regulation of immune response; regulation of T cell activation
Research Articles on IL-28A	**1.** NS of severe fever with thrombocytopenia syndrome virus inhibited the activity of IFN-alpha1, IFN-beta, IFN-lambda1 and IFN-lambda2 through inhibition of STAT1 phosphorylation.
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/human-elisa-kits/il-28a/9501972