

Human IL-28B ELISA Kit | IL-28B elisa kit

IL-28B (Human) OmniKine ELISA Kit

CATALOG #
AAA315735

REACTIVITY
Human

PRODUCT SYNONYMS

IL-28B; IL-28B (Human) OmniKine ELISA Kit; Interleukin-28B; Cytokine Zcyto22; Interferon lambda-3; Interferon lambda-4; Interleukin-28C; IL-28B elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	The OmniKine™ Human IL-28B ELISA is capable of recognizing both recombinant and naturally produced Human IL-28B proteins. The antigens listed below were tested at 50 ng/ml and did not exhibit significant cross reactivity or interference.
Form/Format	12 x 8-Well Microstrips
Sequence Length	200
Assay Type	Quantitative Sandwich
Preparation and Storage	Store entire kit at 4 degree C until use.

ADDITIONAL INFORMATION

Related Product Information for IL-28B elisa kit

Principle of the Assay: The OmniKine™ Human IL-28B ELISA Kit contains the components necessary for quantitative determination of natural or recombinant Human IL-28B 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-28B 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: IL-28B is a cytokine with immunomodulatory activity that up-regulates MHC class I antigen expression. Studies have shown that IL-28A displays potent antiviral activity in addition to antitumor activity. Ligand for the heterodimeric class II cytokine receptor is composed of IL10RB and IL28RA. The ligand/receptor complex seems to signal through the Jak-STAT pathway and induce by viral infections or dsRNA. IL-28B encodes a cytokine distantly related to type I interferons and the IL-10 family. This gene, interleukin 28A (IL28A), 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).

NCBI AND UNIPROT INFORMATION

NCBI GI #	1100961536
NCBI GeneID	282617
NCBI Accession #	NP_001333866.1
NCBI GenBank Nucleotide #	NM_001346937.1
UniProt Accession #	Q8IZI9; Q6VN56; Q7Z4J3; Q8IWL6; A2BDE1
Molecular Weight	21,706 Da
NCBI Official Full Name	interferon lambda-3 isoform 1
NCBI Official Synonym Full Names	interferon lambda 3
NCBI Official Symbol	IFNL3
NCBI Official Synonym Symbols	IL28B; IL28C; IL-28B; IL-28C; IFN-lambda-3; IFN-lambda-4
NCBI Protein Information	interferon lambda-3
UniProt Protein Name	Interferon lambda-3
UniProt Gene Name	IFNL3
UniProt Synonym Gene Names	IL28B; IL28C; ZCYTO22; IFN-lambda-3; IL-28B; IL-28C

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/human-elisa-kits/il-28b/315735>