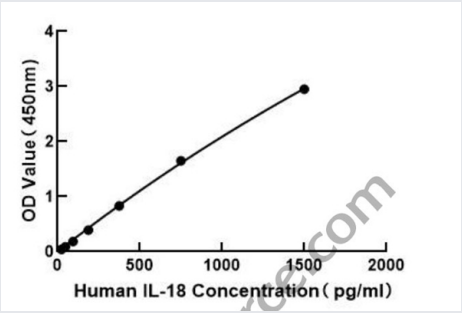
Il-18 ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	IL-18, ELISA Kit
Full Product Name	Human IL-18 ELISA Kit
Product Gene Name	IL-18 elisa kit
Product Synonym Gene Name	IL18
Species Reactivity	Human
Assay Type	Quantitative Sandwich
Sensitivity	< 12pg/mL
Specificity	This assay recognizes both recombinant and natural human IL-18. The factors listed below were prepared at 50ng/ml and assayed for cross-reactivity. No significant cross-reactivity was observed with the following: IL-1, 2, 3, 4, 5, 8, 10, IFN, TNF, sTNF-RII. Note: Limited by current skills and knowledge, it is impossible for us to complete the cross- reactivity detection between IL-18 and all the analogues, therefore, cross reaction may still exist.
Preparation and Storage	Store at 4 degree C.
Inter-assay Precision	Inter-plate Precision 3 samples with low, middle and high level IL-18 were tested on 3 different plates, 20 replicates in each plate. Inter-Assay: CV<15%
Intra-assay Precision	Intra-plate Precision 3 samples with low, middle and high level IL-18 were tested 20 times on one plate, respectively. Intra-Assay: CV<10%
Molecular Weight	21,896 Da
3D Structure	ModBase 3D Structure for Q14116
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for IL-18 elisa kit	Background: The kit is a sandwich enzyme immunoassay for in vitro quantitative measurement of IL-18 in human serum, plasma, cell culture supernatants, cell lysates, tissue homogenates and other biological fluids. Principle of the Assay: This assay employs the quantitative sandwich enzyme immunoassay technique. An antibody specific for human IL-18 has been pre-coated onto a microplate.Standards and samples are pipetted into the wells and any IL-18 present is bound by the immobilized antibody. After washing away any unbound substances, and then a detection antibody specific for IL-18 is added to the wells and binds to the combination of capture antibody IL-18 in sample. Following a wash to remove any unbound combination, and enzyme conjugate is added to the wells. Following incubation and wash steps, a substrate solution is added to the wells and color develops in proportion to the amount of IL-18 bound in the initial step. The color development is stopped and the absorbance is measured.
Other Notes	Small volumes of IL-18 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-18 purchase	MBS9135877 is a ready-to-use microwell, strip-or-full plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the IL-18, 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-18. The ELISA analytical biochemical technique of the MBS9135877 kit is based on IL-18 antibody-IL-18 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect IL-18 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, IL-18. 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 IL-18 elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for IL-18. It may not necessarily be applicable to this product.

NCBI GI #	342349321
NCBI GeneID	3606
NCBI Accession #	NP_001230140.1
UniProt Primary Accession #	Q14116
UniProt Secondary Accession #	O75599; Q6FGY3; Q6WWJ7
UniProt Related Accession #	Q14116
GenBank Nucleotide #	NM_001243211.1
NCBI Official Full Name	interleukin-18 isoform 2
NCBI Official Synonym Full Names	interleukin 18
NCBI Official Symbol	IL18
NCBI Official Synonym Symbols	IGIF; IL-18; IL-1g; IL1F4
UniProt Protein Name	Interleukin-18
UniProt Synonym Protein Names	Iboctadekin; Interferon gamma-inducing factor2 PublicationsManual assertion based on opinion iniRef.13"The structure and binding mode of interleukin-18."Kato Z., Jee J., Shikano H., Mishima M., Ohki I., Ohnishi H., Li A., Hashimoto K., Matsukuma E., Omoya K., Yamamoto Y., Yoneda T., Hara T., Kondo N., Shirakawa M.Nat. Struct. Biol. 10:966-971(2003) [PubMed] [Europe PMC] [Abstract]Cited for: STRUCTURE BY NMR OF 37-193, FUNCTION, SUBUNIT, MUTAGENESIS OF LYS-40; LEU-41; LYS-44; ARG-49; ASP-53; MET-69; ASP-71; ARG-94; MET-96; LYS-115; LYS-120; ASP-134; ARG-140 AND ASP-168.
UniProt Gene Name	IL18
UniProt Synonym Gene Names	IL-183 PublicationsManual assertion based on opinion iniRef.13; IFN-gamma-inducing factor2 PublicationsManual assertion based on opinion iniRef.13; IL-1 gamma
NCBI Protein Information	interleukin-18
NCBI Summary for IL-18	The protein encoded by this gene is a proinflammatory cytokine that augments natural killer cell activity in spleen cells, and stimulates interferon gamma production in T-helper type I cells. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Aug 2011]
UniProt Comments for IL-18	A proinflammatory cytokine primarily involved in polarized T-helper 1 (Th1) cell and natural killer (NK) cell immune responses (Probable). Upon binding to IL18R1 and IL18RAP, forms a signaling ternary complex which activates NF-kappa-B, triggering synthesis of inflammatory mediators (PubMed:14528293, PubMed:25500532). Synergizes with IL12/interleukin-12 to induce IFNG synthesis from T-helper 1 (Th1) cells and natural killer (NK) cells (Probable) (PubMed:10653850).
Research Articles on IL-18	**1.** The results of the linkage disequilibrium test showed that the -137G/C and -607G/T sites had no linkage disequilibrium in the present study.

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