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Anti-IL-18 Antibody

Catalog # ABO10667

Product Information

Application	WB
Primary Accession	Q14116
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Interleukin-18(IL18) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	3606
Other Names	Interleukin-18, IL-18, Iboctadekin, Interferon gamma-inducing factor, IFN-gamma-inducing factor, Interleukin-1 gamma, IL-1 gamma, IL18, IGIF, IL1F4
Calculated MW	22326
Application Details	Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Secreted.
Source	Eukaryota
Protein Name	Interleukin-18
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of Human IL18(175-193aa KKEDELGDRSIMFTVQNED).
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the IL-1 family.

Protein Information

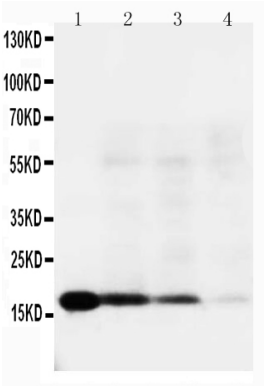
Name	IL18 (HGNC:5986)
Synonyms	IGIF, IL1F4
Function	Pro-inflammatory cytokine primarily involved in epithelial barrier repair, polarized T-helper 1 (Th1) cell and natural killer (NK) cell immune responses (PubMed:10653850). Upon binding to IL18R1 and IL18RAP, forms a signaling ternary complex which activates NF-kappa-B, triggering synthesis of inflammatory mediators (PubMed:14528293, PubMed:25500532, PubMed:37993714). Synergizes with IL12/interleukin-12 to induce IFNG synthesis from T-helper 1 (Th1) cells and natural killer (NK) cells (PubMed:10653850). Involved in transduction of inflammation downstream of pyroptosis: its mature form is specifically released in the extracellular milieu by passing through the gasdermin-D (GSDMD) pore (PubMed:33883744).
Cellular Location	Cytoplasm, cytosol. Secreted. Note=The precursor is cytosolic (PubMed:33883744). In response to inflammasome-activating signals, cleaved and secreted (PubMed:33883744, PubMed:37993712, PubMed:37993714). Mature form is secreted and released in the extracellular milieu by passing through the gasdermin-D (GSDMD) pore (PubMed:33883744, PubMed:37993714). In contrast, the precursor form is not released, due to the presence of an acidic region that is proteolytically removed by CASP1, CASP4 or CASP5 during maturation (PubMed:33883744, PubMed:37993714). The secretion is dependent on protein unfolding and facilitated by the cargo receptor TMED10 (PubMed:32272059).
Tissue Location	[Isoform 2]: Expressed in ovarian carcinoma but undetectable in normal ovarian epithelial cells. Resistant to proteolytic activation by caspase-1 and -4

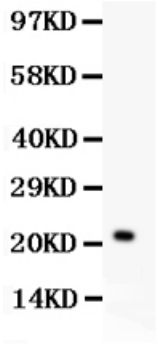
Background

Interleukin-18 also known as IL18 is a protein which in humans is encoded by the IL18 gene. The protein encoded by this gene is a proinflammatory cytokine.IL-18 is a cytokine produced by macrophages and other cells that belongs to the IL-1 superfamily. IL-18 works by binding to the interleukin-18 receptor, and together with IL-12 it induces cell-mediated immunity following infection with microbial products like lipopolysaccharide(LPS). After stimulation with IL-18, natural killer(NK) cells and certain T cells release another important cytokine called interferon-gamma(IFN-gamma) or type II interferon that plays an important role in activating the macrophages or other cells.The combination of this cytokine and IL12 has been shown to inhibit IL4 dependent IgE and IgG1 production, and enhance IgG2a production in B cells. IL-18 binding protein(IL18BP) can specifically interact with this cytokine, and thus negatively regulate its biological activity. The human interleukin 18 gene IL18 maps to 11q22.2-q22.3, closely linked to the DRD2 gene locus and distinct from mapped IDDM loci.

Images

Anti-IL-18 antibody, ABO10667, Western blottingLane 1: Recombinant Human IL-18 Protein 10ngLane 2: Recombinant Human IL-18 Protein 5ngLane 3: Recombinant Human IL-18 Protein 2.5ngLane 4: RAJI Cell Lysate





Western blot analysis of IL-18 expression in HELA whole cell lysates (lane 1). IL-18 at 22KD was detected using rabbit anti- IL-18 Antigen Affinity purified polyclonal antibody (Catalog # ABO10667) at 0.5 □¼g/mL. The blot was developed using chemiluminescence (ECL) method .

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