

Anti-IL-18 Antibody

Catalog # ABO11936

Product Information

Application	WB
Primary Accession	P70380
Host	Rabbit
Reactivity	Mouse
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Interleukin-18(IL18) detection. Tested with WB in Mouse.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	16173
Other Names	Interleukin-18, IL-18, Interferon gamma-inducing factor, IFN-gamma-inducing factor, Interleukin-1 gamma, IL-1 gamma, Il18, Igif
Calculated MW	22135
Application Details	Western blot, 0.1-0.5 µg/ml, Mouse
Subcellular Localization	Secreted.
Source	Eukaryota
Protein Name	Interleukin-18
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived mouse IL-18 recombinant protein (Position: N36-S192). Mouse IL-18 shares 66% and 91% amino acid (aa) sequence identity with human and rat IL-18, respectively.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After reconstitution, 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.

Protein Information

Name	IL18 {ECO:0000312 MGI:MGI:107936}
Synonyms	Ig1f
Function	Pro-inflammatory cytokine primarily involved in epithelial barrier repair, polarized T-helper 1 (Th1) cell and natural killer (NK) cell immune responses (PubMed: 26638072 , PubMed: 26638073). Upon binding to IL18R1 and IL18RAP, forms a signaling ternary complex which activates NF-kappa-B, triggering synthesis of inflammatory mediators (By similarity). Synergizes with IL12/interleukin-12 to induce IFNG synthesis from T-helper 1 (Th1) cells and natural killer (NK) cells (By similarity). 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: 30392956).
Cellular Location	Cytoplasm {ECO:0000250 UniProtKB:Q14116}. Secreted. Note=The precursor is cytosolic (By similarity). In response to inflammasome-activating signals, cleaved and secreted (By similarity). Mature form is secreted and released in the extracellular milieu by passing through the gasdermin-D (GSDMD) pore (PubMed:30392956). In contrast, the precursor form is not released, due to the presence of an acidic region that is proteolytically removed by CASP1 during maturation (By similarity). The secretion is dependent on protein unfolding and facilitated by the cargo receptor TMED10 (By similarity). {ECO:0000250 UniProtKB:Q14116, ECO:0000269 PubMed:30392956}

Background

Interleukin-18, also known as IL18, is a protein which in humans is encoded by the IL18 gene. IL-18 is a cytokine produced by macrophages and other cells that belongs to the IL-1 superfamily. It is mapped to 11q22.2-q22.3. 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- γ (IFN- γ) 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.

Images



Anti- IL-18 Picoband antibody, ABO11936, Western blottingAll lanes: Anti IL-18 (ABO11936) at 0.5ug/mlWB: Recombinant Mouse IL-18 Protein 0.5ngPredicted bind size: 22KDObserved bind size: 22KD

Anti- IL-18 Picoband antibody, ABO11936, Western blottingAll lanes: Anti IL-18 (ABO11936) at 0.5ug/mlWB: NIH3T3 Whole Cell Lysate at 40ugPredicted bind size: 22KDObserved bind size: 50KD



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