

## Anti-IL-18 Antibody Catalog # ABO11936

## **Specification**

## **Anti-IL-18 Antibody - Product Information**

Application WB
Primary Accession P70380
Host 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.

### **Anti-IL-18 Antibody - 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 MW KDa

#### **Application Details**

Western blot, 0.1-0.5 µg/ml, Mouse<br>

# **Subcellular Localization**

Secreted.

# **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 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.

# **Anti-IL-18 Antibody - Protein Information**

Name II18 {ECO:0000312|MGI:MGI:107936}

**Synonyms** Igif

#### **Function**

Pro-inflammatory cytokine primarily involved in epithelial barrier repair, polarized T-helper 1 (Th1) cell and natural killer (NK) cell immune responses (PubMed:<a

href="http://www.uniprot.org/citations/26638072" target="\_blank">26638072</a>, PubMed:<a href="http://www.uniprot.org/citations/26638073" target="\_blank">26638073</a>). 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:<a href="http://www.uniprot.org/citations/30392956" target="\_blank">30392956</a>).

#### **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}

## **Anti-IL-18 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

#### Anti-IL-18 Antibody - Images



97KD —
58KD —
40KD —
29KD —
20KD —
14KD —

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

100KD — 70KD — 55KD — 35KD — 25KD —

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

# Anti-IL-18 Antibody - 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- $\hat{l}^3$  (IFN- $\hat{l}^3$ ) 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.