

# Anti-IL-18 Antibody

**Catalog # ABO12702** 

### **Specification**

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

Application WB, E
Primary Accession P70380
Host Reactivity Mouse
Clonality Polyclonal
Format Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Interleukin-18(IL18) detection. Tested with WB, ELISA 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**

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

# **Subcellular Localization**

Secreted.

### **Protein Name**

Interleukin-18

### **Contents**

Each vial contains 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3. Carrier free (No BSA) form available in stock. If you want this antibody carrier free please specify Carrier Free" or "No BSA" in your order note. "

#### **Immunogen**

E. coli-derived mouse IL-18 recombinant protein(Position: N36-S192).

#### **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>/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}

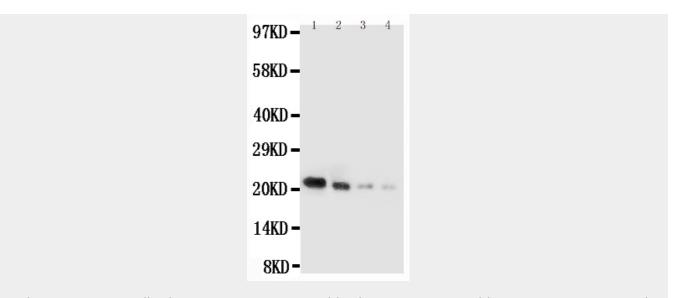
#### **Anti-IL-18 Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Anti-IL-18 Antibody - Images





Anti-mouse IL-18 antibody, ABO12702, Western blottingLane 1: Recombinant Mouse IL-18 Protein 10ngLane 2: Recombinant Mouse IL18 Protein 5ngLane 3: Recombinant Mouse IL18 Protein 2

# Anti-IL-18 Antibody - 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.