

### **Goat Anti-IL18 Antibody**

Peptide-affinity purified goat antibody Catalog # AF1563a

## **Specification**

## **Goat Anti-IL18 Antibody - Product Information**

Application WB
Primary Accession 014116

Other Accession NP\_001553, 3606, 29197 (rat)

Reactivity Human
Host Goat
Clonality Polyclonal
Concentration 100ug/200ul

Isotype IgG
Calculated MW 22326

# **Goat Anti-IL18 Antibody - 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

#### **Format**

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

## **Precautions**

Goat Anti-IL18 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **Goat Anti-IL18 Antibody - 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:<a

href="http://www.uniprot.org/citations/10653850" target="\_blank">10653850</a>). Upon binding to IL18R1 and IL18RAP, forms a signaling ternary complex which activates NF-kappa-B, triggering



synthesis of inflammatory mediators (PubMed:<a

 $\label{lem:http://www.uniprot.org/citations/14528293" target="_blank">14528293</a>, PubMed:<a href="http://www.uniprot.org/citations/25500532" target="_blank">25500532</a>, PubMed:<a href="http://www.uniprot.org/citations/37993714" target="_blank">37993714</a>). Synergizes with IL12/interleukin-12 to induce IFNG synthesis from T-helper 1 (Th1) cells and natural killer (NK) cells (PubMed:<a href="http://www.uniprot.org/citations/10653850" target="_blank">10653850</a>). Involved in transduction of inflammation downstream of$ 

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/33883744" target="\_blank">33883744</a>).

### **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**

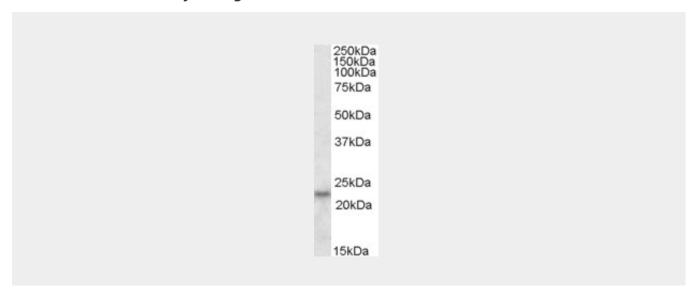
[Isoform 2]: Expressed in ovarian carcinoma but undetectable in normal ovarian epithelial cells. Resistant to proteolytic activation by caspase-1 and -4

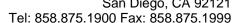
## Goat Anti-IL18 Antibody - Protocols

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

## Goat Anti-IL18 Antibody - Images







AF1563a (0.1 μg/ml) staining of HeLa lysate (35 μg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

## Goat Anti-IL18 Antibody - Background

The protein encoded by this gene is a proinflammatory cytokine. This cytokine can induce the IFN-gamma production of T cells. The combination of this cytokine and IL12 has been shown to inhibit IL4 dependent IgE and IgG1 production, and enhance IgG2a production of B cells. IL-18 binding protein (IL18BP) can specifically interact with this cytokine, and thus negatively regulate its biological activity.

# Goat Anti-IL18 Antibody - References

Inflammatory Mediators Gene Polymorphisms in Preeclampsia. Franchim CS, et al. Hypertens Pregnancy, 2010 Sep 6. PMID 20818961.

Functional association of interleukin-18 gene -607 C/A promoter polymorphisms with endometriosis. Ayaz L, et al. Fertil Steril, 2010 Aug 25. PMID 20797704.

IL-18 gene polymorphism, cardiovascular mortality and coronary artery disease. Hernesniemi JA, et al. Eur J Clin Invest, 2010 Aug 2. PMID 20735470.

A genetic association study of maternal and fetal candidate genes that predispose to preterm prelabor rupture of membranes (PROM). Romero R, et al. Am J Obstet Gynecol, 2010 Jul 29. PMID 20673868.

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.