

# IL18 Antibody (Center) Blocking peptide

Synthetic peptide Catalog # BP10957b

## **Specification**

## IL18 Antibody (Center) Blocking peptide - Product Information

**Primary Accession** 

**Q14116** 

# IL18 Antibody (Center) Blocking peptide - 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**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

## IL18 Antibody (Center) Blocking peptide - 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

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

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

## IL18 Antibody (Center) Blocking peptide - Protocols

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

### • Blocking Peptides

# IL18 Antibody (Center) Blocking peptide - Images

## IL18 Antibody (Center) Blocking peptide - Background

The protein encoded by this gene is a proinflammatorycytokine. This cytokine can induce the IFN-gamma production of Tcells. The combination of this cytokine and IL12 has been shown toinhibit IL4 dependent IgE and IgG1 production, and enhance IgG2aproduction of B cells. IL-18 binding protein (IL18BP) canspecifically interact with this cytokine, and thus negatively regulate its biological activity.

## IL18 Antibody (Center) Blocking peptide - References

Hernesniemi, J.A., et al. Eur. J. Clin. Invest. 40(11):994-1001(2010)Hartford, M., et al. Arterioscler. Thromb. Vasc. Biol. 30(10):2039-2046(2010)Romero, R., et al. Am. J. Obstet. Gynecol. 203 (4), 361 (2010):Franchim, C.S., et al. Hypertens Pregnancy (2010) In press: Ayaz, L., et al. Fertil. Steril. (2010) In press: