

IL18 Blocking Peptide (C-term)

Synthetic peptide Catalog # BP20583c

Specification

IL18 Blocking Peptide (C-term) - Product Information

Primary Accession

<u>014116</u>

IL18 Blocking Peptide (C-term) - 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

Target/Specificity

The synthetic peptide sequence is selected from aa 175-188 of HUMAN IL18

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 Blocking Peptide (C-term) - 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:10653850). Upon binding to IL18R1 and IL18RAP, forms a signaling ternary complex which activates NF-kappa-B, triggering synthesis of inflammatory mediators (PubMed:14528293, PubMed:25500532, PubMed:37993714). 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). 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:33883744).

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 Blocking Peptide (C-term) - Protocols

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

Blocking Peptides

IL18 Blocking Peptide (C-term) - Images

IL18 Blocking Peptide (C-term) - Background

Augments natural killer cell activity in spleen cells and stimulates interferon gamma production in T-helper type I cells.

IL18 Blocking Peptide (C-term) - References

Ushio S.,et al.J. Immunol. 156:4274-4279(1996). Gaggero A.,et al.Oncogene 23:7552-7560(2004). Yong D.,et al.Submitted (JUL-1998) to the EMBL/GenBank/DDBJ databases. Liu J.,et al.Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases. Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.