

IL-18 Antibody

Rabbit Polyclonal Antibody Catalog # ABV10863

Specification

IL-18 Antibody - Product Information

Application WB, IHC **Primary Accession** 014116 Other Accession AAC27787 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 22326

IL-18 Antibody - Additional Information

Gene ID 3606

Application & Usage Western blot analysis (0.5-4 μg/ml).

However, the optimal conditions should be determined individually. Recombinant human IL-18 can be used as a positive

control.

Other Names

IL-18, IL18, IL 18, Interluekin-18, Interluekin 18, interluekin

Target/Specificity

IL-18

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

 $100 \mu g$ (0.5 mg/ml) affinity purified rabbit anti-human IL-18 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, and 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions



IL-18 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

IL-18 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: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

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
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

IL-18 Antibody - Images

IL-18 Antibody - Background





Interleukin-18 (IL-18), an 18 kDa cytokine, is a single, non-glycosylated polypeptide chain containing 157 amino acids. IL-18 was previously known as interferon-g inducing factor (IGIF). This pleiotropic cytokine is produced by monocyte/macrophage cells. Like IL-12, IL-18 plays an important role in cell-mediated immune responses.