

IL18 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20583c

Specification

IL18 Antibody (C-term) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype WB, IHC-P, IF, FC,E <u>014116</u> Human Rabbit Polyclonal Rabbit IgG

IL18 Antibody (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

This IL18 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 155-188 amino acids from the C-terminal region of human IL18.

Dilution WB~~1:1000 IHC-P~~1:25 IF~~1:25 FC~~1:25 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

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

Precautions

IL18 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

IL18 Antibody (C-term) - Protein Information

Name IL18 (<u>HGNC:5986</u>)



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:<u>10653850</u>). Upon binding to IL18R1 and IL18RAP, forms a signaling ternary complex which activates NF-kappa-B, triggering synthesis of inflammatory mediators (PubMed:<u>14528293</u>, PubMed:<u>25500532</u>, PubMed:<u>37993714</u>). Synergizes with IL12/interleukin-12 to induce IFNG synthesis from T-helper 1 (Th1) cells and natural killer (NK) cells (PubMed:<u>10653850</u>). 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:<u>33883744</u>).

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

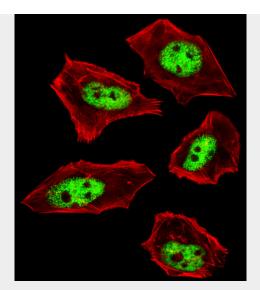
IL18 Antibody (C-term) - Protocols

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

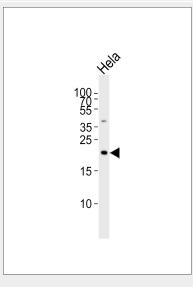
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IL18 Antibody (C-term) - Images



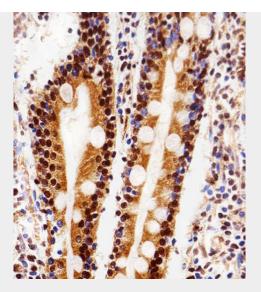


Fluorescent image of U251 cells stained with IL18 Antibody (C-term) (Cat#AP20583c). AP20583c was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).

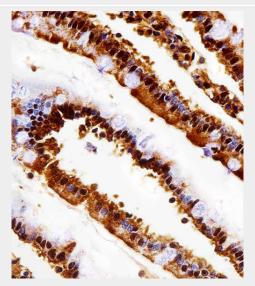


Western blot analysis of lysate from Hela cell line, using IL18 Antibody (C-term) (Cat. #AP20583c). AP20583c was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.



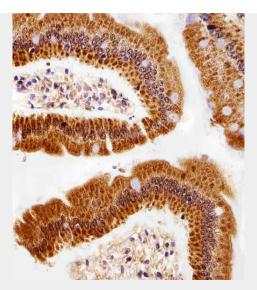


Immunohistochemical analysis of paraffin-embedded H. small intestine section using IL18 Antibody (C-term)(Cat#AP20583c). AP20583c was diluted at 1:100 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.

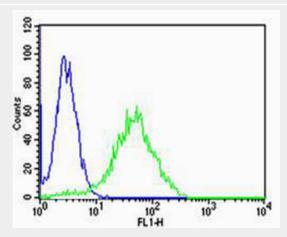


Immunohistochemical analysis of paraffin-embedded R. small intestine section using IL18 Antibody (C-term)(Cat#AP20583c). AP20583c was diluted at 1:100 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.





Immunohistochemical analysis of paraffin-embedded M. small intestine section using IL18 Antibody (C-term)(Cat#AP20583c). AP20583c was diluted at 1:100 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.



Flow cytometric analysis of Hela cells using IL18 Antibody (C-term)(green, Cat#AP20583c) compared to an isotype control of rabbit IgG(blue). AP20583c was diluted at 1:25 dilution. An Alexa Fluor® 488 goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody.

IL18 Antibody (C-term) - Background

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

IL18 Antibody (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.

IL18 Antibody (C-term) - Citations

• Expression and clinical value of NLRP1 and NLRC4 inflammasomes in prostate cancer

