

IL18 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10957b

Specification

IL18 Antibody (Center) - Product Information

Application	IF, WB, IHC-P,E
Primary Accession	Q14116
Other Accession	NP_001553.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	44-73

IL18 Antibody (Center) - 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 rabbits immunized with a KLH conjugated synthetic peptide between 44-73 amino acids from the Central region of human IL18.

Dilution

IF~~1:10~50
WB~~1:1000
IHC-P~~1:10~50

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 (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

IL18 Antibody (Center) - 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:[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).

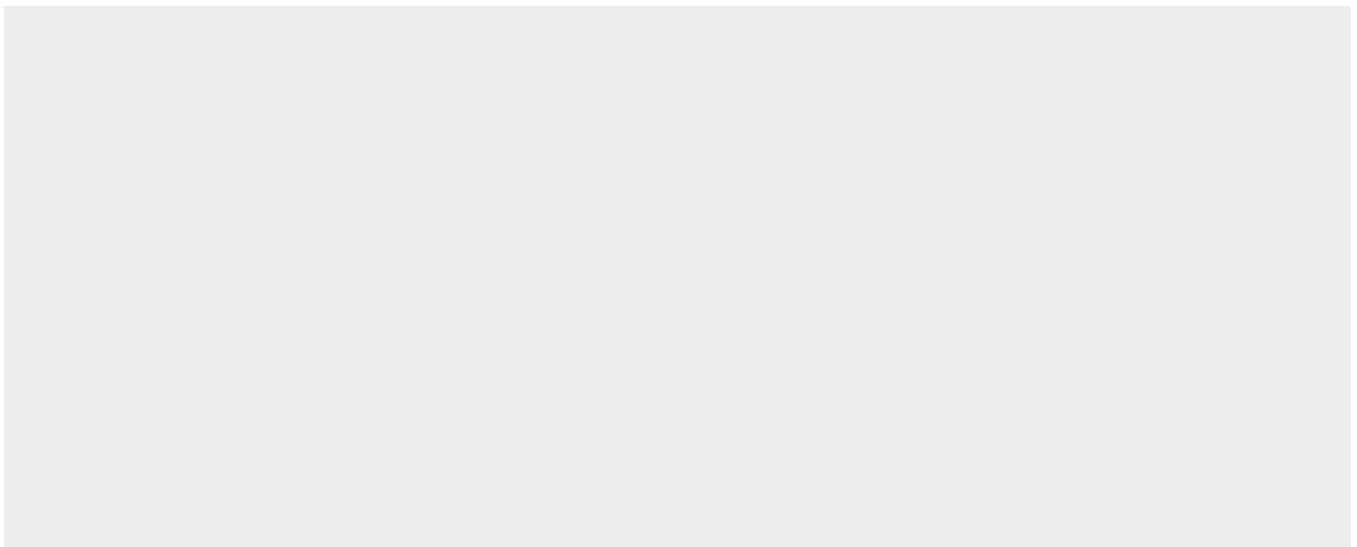
Tissue Location

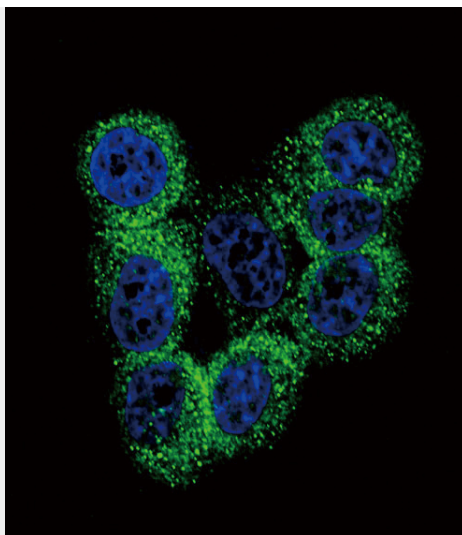
[Isoform 2]: Expressed in ovarian carcinoma but undetectable in normal ovarian epithelial cells. Resistant to proteolytic activation by caspase-1 and -4

IL18 Antibody (Center) - Protocols

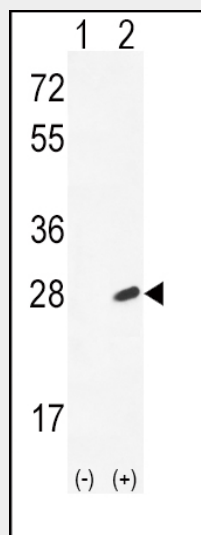
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

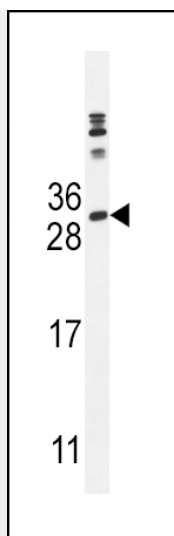
IL18 Antibody (Center) - Images



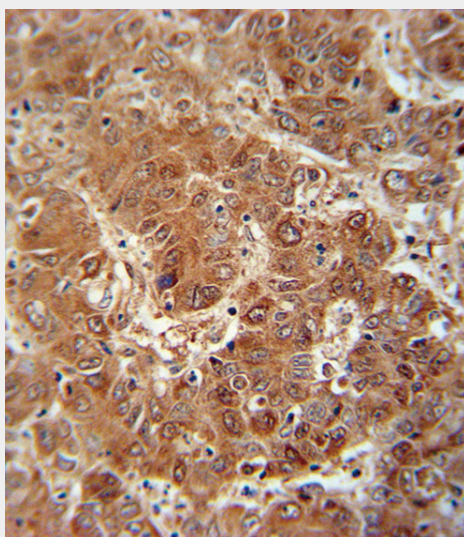
Confocal immunofluorescent analysis of IL18 Antibody (Center) (Cat. #AP10957b) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).



Western blot analysis of IL18 (arrow) using rabbit polyclonal IL18 Antibody (Center) (Cat. #AP10957b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the IL18 gene (Lane 2) .



IL18 Antibody (Center) (Cat. #AP10957b) western blot analysis in MDA-MB468 cell line lysates (35ug/lane). This demonstrates the IL18 antibody detected the IL18 protein (arrow).



IL18 antibody (Center) (Cat. #AP10957b) immunohistochemistry analysis in formalin fixed and paraffin embedded human hepatocarcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the IL18 antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

IL18 Antibody (Center) - 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.

IL18 Antibody (Center) - 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 :