10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

IL18 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20583c

Product Information

Application	WB, IHC-P, IF, FC, E
Primary Accession	Q14116
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB48154
Calculated MW	22326

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~~1:100~500 IF~~1:25 FC~~1:25 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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.

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

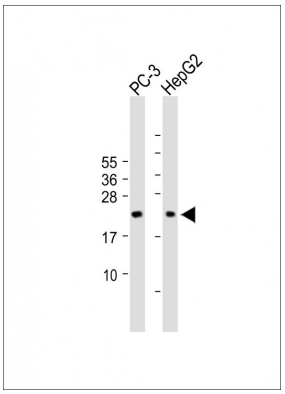
Background

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

References

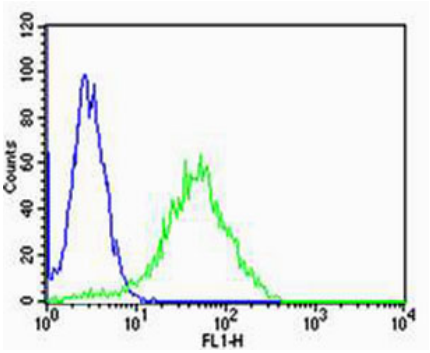
Ushio S.,et al.J. Immunol. 156:4274-4279(1996).
Gaggero A.,et al.Oncogene 23:7552-7560(2004).
Yong D.,et al.Submitted (JUL-1998) to the EMBL/GenBank/DDBJ databases.
Liu J.,et al.Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.
Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.

Images

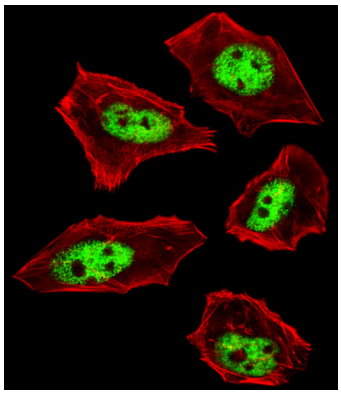


All lanes : Anti-IL18 Antibody (C-term) at 1:2000 dilution Lane 1: PC-3 whole cell lysate Lane 2: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 22kDa Blocking/Dilution buffer: 5% NFDM/TBST.

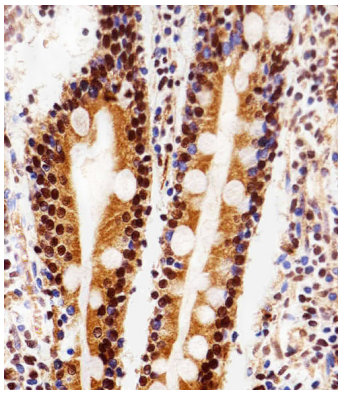
Flow cytometric analysis of Hela cells using IL18 Antibody (C-term)(green, Cat#AP20583c) compared to an isotype control of rabbit IgG(blue). AP20583c was diluted at 1:25



dilution. An Alexa Fluor® 488 goat anti-rabbit lgG at 1:400 dilution was used as the secondary antibody.



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 lgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



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.

Citations

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.