

Datasheet for ABIN7505120

IL-18 Protein (AA 37-115) (His-Avi Tag)



Overview

Quantity:	100 μg
Target:	IL-18 (IL18)
Protein Characteristics:	AA 37-115
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This IL-18 protein is labelled with His-Avi Tag.

Product Details

Sequence:	Tyr 37-Lys 115
Characteristics:	A DNA sequence encoding the Human IL18 N terminal protein (Q14116) (Tyr 37-Lys 115) was expressed with a C-Avi-His tag.
Purity:	> 95 % as determined by reducing SDS-PAGE.

Target Details

Target:	IL-18 (IL18)	
Alternative Name:	IL18 (IL18 Products)	
Background:	Abbreviation: IL18 N terminal	
	Target Synonym: IGIF;IL-18;IL-1g;IL1F4;Interleukin 18	
	Background: Interleukin-18 (IL-18; also known as interferon-gamma inducing factor) is a	
	proinflammatory cytokine that belongs to the IL-1 superfamily and is produced by	

macrophages and other cells. This cytokine can induce the IFN-gamma production of T cells. The combination of IL-18 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. IL-18 is an IL-1-like cytokine that requires cleavage with caspase-1 to become active; was found to increase IgE production in a CD4+ T cells-; IL-4- and STAT6-dependent fashion. IL-18 and T cell receptor-mediated stimulation could induce naïve CD4+ T cells to develop into IL-4-producing cells in vitro. Thus; caspase-1 and IL-18 may be critical in regulation of IgE production in vivo; providing a potential therapeutic target for allergic disorders. IL-18 production in primary synovial cultures and purified synovial fibroblasts was; in turn; upregulated by TNF- α and IL-1 β ; suggesting that monokine expression can feed back to promote Th1 cell development in synovial membrane. Besides; synergistic combinations of IL-18; IL-12; and IL-15 may be of importance in sustaining both Th1 responses and monokine production in RA.

Molecular Weight:

Calculated MW: 8.58 kDa

Observed MW: 12 kDa

UniProt:

Q14116

Pathways:

Cellular Response to Molecule of Bacterial Origin, Activated T Cell Proliferation, Cancer Immune Checkpoints, Inflammasome

Application Details

Restrictions:

For Research Use only

Handling

Format:	Lyophilized
Buffer:	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01 % Tween80 are added as protectants before lyophilization.
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

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Expiry Date:

12 months