


Human IL-18 protein

Cat #: PRP100039

Size: 10µg100µg/1mg

Product Information

	Product Name: Human IL-18 protein		
REF	Catalog Number: PRP100039	LOT	Lot Number: Refer to product label
	Purity: > 85 % as determined by SDS-PAGE.		
	Storage: Store at -20°C		Preparation method: E. coli
	Shipping: The product is shipped at ambient temperature.		

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-1β, 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.

Sequence: Amino acid sequence derived from human IL18 (NP_001553.1) (Tyr37-Asp193) was expressed.

Protein length: The recombinant human IL18 consists 157 amino acids and predicts a molecular mass of 18.2 kDa.

Formulation: Lyophilized from sterile PBS, pH 7.4.

Storage Instructions: Lyophilized Human IL18 protein product should be stored desiccated below -18°C. Upon reconstitution, the protein should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Usage notes: Always centrifuge tubes before opening. It is recommended to reconstitute the lyophilized Human IL18 protein

in sterile ddH₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

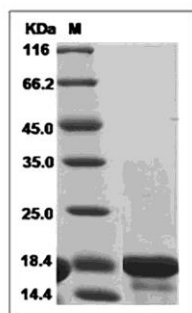


Fig. SDS-PAGE analysis of Human IL-18 protein.

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