


## Human IL-18 Protein, (Animal-Free)

Cat #: PRP1903

Size: 5 µg/20 µg/100 µg/1 mg

### Product Information

	<b>Product Name:</b> Human IL-18 Protein, (Animal-Free)		
<b>REF</b>	<b>Catalog Number:</b> PRP1903	<b>LOT</b>	<b>Lot Number:</b> Refer to product label
	<b>Purity:</b> > 95 % as determined by SDS-PAGE		
	<b>Storage:</b> Store at -20°C		<b>Preparation method:</b> E.coli
	<b>Shipping:</b> The product is shipped at ambient temperature.		

**Background:** Interleukin-18 (IL-18) belongs to the IL-1 superfamily and is constitutively produced by macrophages, dendritic cells (DCs) and other cells. IL-18 binds to the receptor of IL-18 (IL-18R) and initiate the recruitment and heterodimerization of the IL-18RAcP, leading to downstream activation of NF-κB. After stimulation with IL-18, multiple cytokines including IFN-γ, IL-13, IL-4, IL-8, and GM-CSF and both Th1 and Th2 lymphokines could be produced by different cells. As an immunoregulatory cytokine, IL-18 can promote development of T helper 1 (Th1) cells, which maximizes the production of IFN by synergistically stimulating to mature Th1 effectors in combination with IL-12. On the contrary, it inhibits the production of the anti-inflammatory cytokine IL-10. In addition, IL-18 exhibits multiple proinflammatory functions, such as increases in cell adhesion molecules, nitric oxide synthesis, and chemokine production.

**Sequence:** Amino acid sequence derived from Human IL-18 (Tyr37-Asp193) (Q14116) was expressed.

**Protein length:** The recombinant Human IL-18 Protein consists of 157 amino acids and predicts a molecular mass of 18.2 kDa.

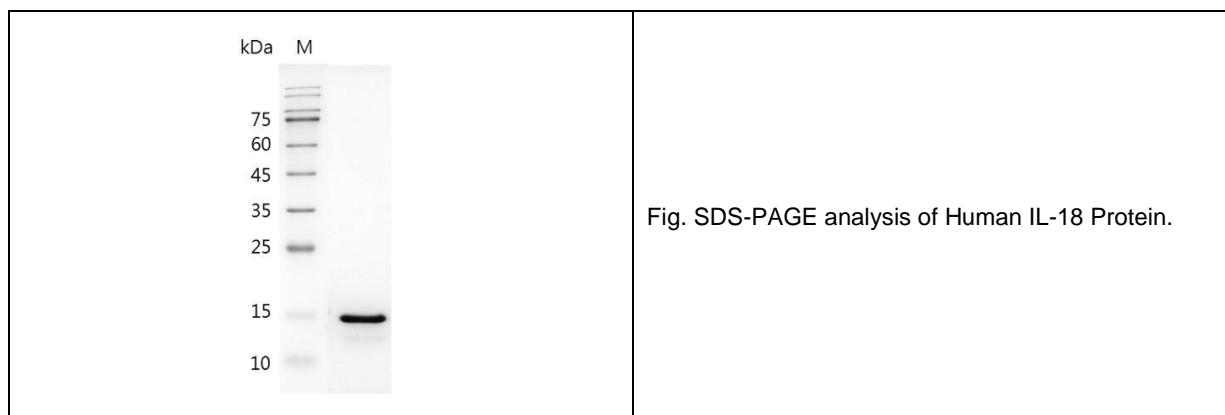
**Biological Activity:** Measured by its ability to induce IFN gamma secretion in KG-1 cells. The ED<sub>50</sub> for this effect is <6 ng/mL.

**Endotoxin:** <0.1 EU per µg of the protein by the LAL method.

**Formulation:** Lyophilized from sterile PBS, pH 7.4.

**Storage Instructions:** Lyophilized 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 (5% HSA, 10%FBS or 0.1%BSA). Please prevent freeze-thaw cycles.

**Usage notes:** Always centrifuge tubes before opening. It is recommended to reconstitute the lyophilized recombinant protein to a concentration of 0.1-1 mg/mL using the buffer we provided, and keep at room temperature for at least 20 min to fully dissolve. Please avoid vortex vigorously.



**Note:** The product listed herein is for research use only and is not intended for use in human or clinical diagnosis. Suggested applications of our products are not recommendations to use our products in violation of any patent or as a license. We cannot be responsible for patent infringements or other violations that may occur with the use of this product.