## Biotin Conjugated Anti-Human IL-18 Antibody [PSH01-70] **HA722644B**

**Product Type:** Recombinant Rabbit monoclonal IgG, primary antibodies

Species reactivity: Human Applications: ELISA(Det)

Molecular Wt: Predicted band size: 22.3 kDa

PSH01-70 Clone number:

Description: Interleukin-18 (IL-18), also known as interferon-gamma inducing factor is a protein which in

> humans is encoded by the IL18 gene. The protein encoded by this gene is a proinflammatory cytokine. Many cell types, both hematopoietic cells and non-hematopoietic cells, have the potential to produce IL-18. It was first described in 1989 as a factor that induced interferon-y (IFN-y) production in mouse spleen cells. Originally, IL-18 production was recognized in Kupffer cells, liver-resident macrophages. However, IL-18 is constitutively expressed in non-hematopoietic cells, such as intestinal epithelial cells, keratinocytes, and endothelial cells. IL-18 can modulate both innate and adaptive immunity and its dysregulation can cause autoimmune or inflammatory diseases. IL-18 belongs to the IL-1 superfamily and is produced mainly by macrophages but also other cell types, stimulates various cell types and has pleiotropic functions. IL-18 is a proinflammatory cytokine that facilitates type 1 responses. Together with IL-12, it induces cell-mediated immunity following infection with microbial products like lipopolysaccharide (LPS). IL-18 in combination with IL12 acts on CD4, CD8 T cells and NK cells to induce IFNy production, type II interferon that plays an important role in activating the macrophages or other cells. The combination of this IL-18 and IL-12 has been shown to inhibit IL-4 dependent IgE and IgG1 production and enhance IgG2a production in B cells. Importantly, without IL-12 or IL-15, IL-18 does not induce IFNy production, but plays an important role in the differentiation of naive T cells into Th2 cells and stimulates mast cells and basophils to produce IL-4, IL-13,

and chemical mediators such as histamine.

Recombinant human IL-18 protein (HA210779).

Conjugate: Biotin-conjugated

Immunogen: Recombinant protein within Human IL-18 aa 37-193. Positive control:

Subcellular location: Cytoplasm, Secreted.

Database links: SwissProt: Q14116 Human

Recommended Dilutions:

ELISA(Det) Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit

monoclonal [PSH01-71] to Human IL-18 (Capture) (HA721722). The reference range value

is 15.6-3800 pg/ml.

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% ProClin300.

Store at  $+4^{\circ}$ C after thawing. Aliquot store at  $-20^{\circ}$ C. Avoid repeated freeze / thaw cycles. Storage Instruction:

Purity: Protein A affinity purified.

## Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880 Technical:0086-571-89986345 Service mail:support@huabio.cn



## No Images

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

## **Background References**

- 1. Zhang X et al. IL18 signaling causes islet  $\beta$  cell development and insulin secretion via different receptors on acinar and  $\beta$  cells. Dev Cell. 2022 Jun
- 2. Lin T et al. NET-Triggered NLRP3 Activation and IL18 Release Drive Oxaliplatin-Induced Peripheral Neuropathy. Cancer Immunol Res. 2022 Dec