IL18 / IL-18 Antibody, Rabbit PAb

Catalog Number: **10119-RP01**

General Information	
Immunogen:	Recombinant Human IL18 / IL-18 protein (Catalog#10119-H09E)
Ig Type:	Rabbit IgG
Applications:	ELISA
Specificity:	Human IL18 / IL-18
Formulation:	0.2 μm filtered solution in PBS
Storage:	< -20℃

Preparation

Produced in rabbits immunized with purified, recombinant Human IL18 / IL-18 (rh IL18; Catalog#10119-H09E; Q14116; Met1-Asp193). Total IgG was purified by Protein A affinity chromatography.

Applications

ELISA **–** This antibody can be used at 0.5-1.0 μg/mL with the appropriate secondary reagents to detect Human IL18 / IL-18. The detection limit for Human IL18 / IL-18 is

Specificity

Human IL18 / IL-18

Storage

This antibody can be stored at 2℃-8℃ for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20℃ to -80℃. **Preservative-Free.**
Sodium azide is recommended to avoid contamination (final concentration 0.05%-0.1%). It is toxic to cells and should be disposed of properly. **Avoid repeated freeze-thaw cycles.**

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.

Reference

Dinarello CA. (1999) IL-18: A TH1-inducing, proinflammatory cytokine and new member of the IL-1 family. J Allergy Clin Immunol. 103: 11-24.
Takeda K, *et al.*. (1998) Defective NK cell activity and Th1 response in IL-18-deficient mice. Immunity. 8(3): 383-90.
Gracie JA, *et al.*. (1999) A proinflammatory role for IL-18 in rheumatoid arthritis. J Clin Invest. 104(10): 1393-401.