



Polyclonal Anti- Interleukin-18, IL-18 (Magnetic Bead Conjugate)

Catalogue No. PA1342-M

Lot No. 0131012034299

Ig type rabbit IgG

Size 100µg/vial

Specificity

Human

No cross reactivity with other proteins.

Recommended application

ImmunoPrecipitation (IP)

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminal of Human IL-18 (175-193 aa), identical to the related mouse and rat sequence.

Purity

Immunogen affinity purified.

Contents

Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg NaN₃.

Storage

Store at 4°C for frequent use.

Description

This Antagene antibody is immobilized by the covalent reaction of hydrazinonicotinamide-modified antibody with formylbenzamide-modified magnetic beads. It is useful for immunoprecipitation.

BACKGROUND

Interleukin-18 also known as IL18 is a protein which in humans is encoded by the IL18 gene.^{[1][2]} The protein encoded by this gene is a proinflammatory cytokine. IL-18 is a cytokine produced by macrophages and other cells that belongs to the IL-1 superfamily. IL-18 works by binding to the interleukin-18 receptor, and together with IL-12 it induces cell-mediated immunity following infection with microbial products like lipopolysaccharide (LPS). After stimulation with IL-18, natural killer (NK) cells and certain T cells release another important cytokine called interferon-γ (IFN-γ) or type II interferon that plays an important role in activating the macrophages or other cells. The combination of this cytokine and IL12 has been shown to inhibit IL4 dependent IgE and IgG1 production, and enhance IgG2a production in B cells. IL-18 binding protein (IL18BP) can specifically interact with this cytokine, and thus negatively regulate its biological activity.^[3] The human interleukin 18 gene IL18 maps to 11q22.2-q22.3, closely linked to the DRD2 gene locus and distinct from mapped IDDM loci⁴

REFERENCE

- 1、 Okamura H, Tsutsi H, Komatsu T, Yutsudo M, Hakura A, Tanimoto T, Torigoe K, Okura T, Nukada Y, Hattori K (November 1995). "Cloning of a new cytokine that induces IFN-gamma production by T cells". *Nature* 378 (6552): 88–91.
- 2、 Nolan KF, Greaves DR, Waldmann H (July 1998). "The human interleukin 18 gene IL18 maps to 11q22.2-q22.3, closely linked to the DRD2 gene locus and distinct from mapped IDDM loci". *Genomics* 51 (1): 161–3..
- 3、 "Entrez Gene: IL18 interleukin 18 (interferon-gamma-inducing factor)".
- 4、 Nolan, K. F., Greaves, D. R., Waldmann, H. The human interleukin 18 gene IL18 maps to 11q22.2-q22.3, closely linked to the DRD2 gene locus and distinct from mapped IDDM loci. *Genomics* 51: 161-163, 1998.