

Rabbit Polyclonal Anti-IL17 antibody

Catalog Number: IL17-101AP

Lot Number:

General Information

Product	IL17 Antibody
Description	Interleukin-17 Antibody
Accession #	Uniprot: Q96F46 GenBank: AAB99730.1
Verified Applications	CM, ELISA, ICC, IF, IHC, WB
Species Cross Reactivity	Human, Mouse, Rat
Host	Rabbit
Immunogen	Synthetic peptide taken within amino acid region 100-150 on human IL17 protein.
Alternative Nomenclature	CTLA8 antibody, IL17A antibody

Physical Properties

Quantity	100 µg
Volume	200 µl
Form	Affinity Purified Immunoglobulins
Immunoglobulin & Concentration	0.5 mg/ml IgG in antibody stabilization buffer
Storage	Store at -20°C for long term storage.

Recommended Dilutions

DOT Blot	1:10,000
ELISA	1:10,000
Immunocytochemistry	1:200
Immunofluorescence	1:200
Immunohistochemistry	1:200
Western Blot	1:500

Related Products

Catalog

FITC-Conjugated	IL17-FITC
BIOTIN-Conjugated	IL17-BIOTIN
Antigenic Blocking Peptide	P-IL17
Western Blot Positive Control	PC-IL17

Application Verification:



WB of IL17-101AP with PC-IL17. 1:750 dilution in DiluObuffer on 12% SDS-PAGE gel. Apparent MW is 18 kDa.

Dilutions are for reference only. Applications not listed above are not necessarily precluded from working with this antibody. Investigators intending to use an application that has not been verified can request a complimentary sample.

Overview:

The primary function of the body defense mechanism/immune system is to protect the organism from invading pathogens. In this regard a very effective and dynamic cellular network has evolved that comprises of innate and adaptive immunity. Most components of innate immunity are present before the onset of infection and constitute cellular and molecular components that recognize classes of molecules peculiar to pathogens. In contrast, adaptive immunity responds to the challenge with a high degree of specificity as well as the remarkable property of memory. Although adaptive immune responses are the most effective to clear invading pathogens, innate immune responses should be precedent of activation of adaptive immune cells (1,2). Adaptive immune responses cannot arise without help of innate immune responses. Antigen presenting cells (APCs) are key initiators of immune responses. During infection various cytokines are released and via activation of various TLR receptor family, they synthesized various interleukins. IL17 gene was mapped at a single site on mouse chromosome 1A and human chromosome 2q31 (2).

Pro inflammatory cytokine IL-17, plays a central role in inflammation and autoimmunity. IL17, like other cytokines, is produced by activation of T cell receptor through CD3 cross linking (1). IL-17 is a crucial effector cytokine, whose production is specifically triggered by IL-23. It has been shown to be an essential inflammatory mediator in other autoimmune diseases and inflammatory conditions. In humans the co-stimulation of T cells through CD28 and several costimulatory molecules (ICOS, 4-1BB, CD40L) mildly enhance the IL17 expression, whereas IL23 profoundly enhance the CD3 induced IL17 expression. The IL-17 expression is also sensitive to cyclosporine-A and MAPK inhibitors, suggesting the involvement of the Calcineurin/NFAT and MAPK signaling pathways.

The predicted 155-amino acids sequence contains an N-terminal signal peptide and exhibits 72% amino acid identity with HVS13, an open reading frame from a T-lymphotropic Herpesvirus saimiri, and 63% with murine CTLA8 (3). Based on hydropathy plot, there are two transmembrane domains at N- and C-terminal end of the protein. The anti-IL17 (IL17-101AP) antibodies were made against an epitope that lies near the extracytoplasmic domain on IL17 protein. The antibodies to IL17 were affinity purified on immobilized affinity based chromatography and characterized using recombinant IL17 western blot positive control sample (PC-IL17). The IL17 antibodies do not cross react with other pro-inflammatory or anti-inflammatory interleukins, or with other proteins. IL17 antigenic blocking peptide (P-IL17) are available. FabGennix carries IL17 receptor variant specific antibodies and other cytokines, for a complete listing please visit <http://fabgennix.com>.

References:

1. Fossiez F, etl. Al., T cell interleukin-17 induces stromal cells to produce proinflammatory and hematopoietic cytokines. J Exp Med. 1996 Jun 1;183(6):2593-603.
2. Rouvier E, Luciani MF, Mattei MG, Denizot F, Golstein P. CTLA-8, cloned from an activated T cell, bearing AU-rich messenger RNA instability sequences, and homologous to a herpesvirus saimiri gene. J Immunol. 1993 Jun 15;150(12):5445-56.
3. Yao Z., et. Al., Human IL-17: a novel cytokine derived from T cells. J Immunol. 1995 Dec 15;155(12):5483-6.

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