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IL17F Rabbit pAb

Catalog # AP96166

Product Information

Application	WB
Primary Accession	Q96PD4
Other Accession	Q96PD4
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	18045
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human IL-17F
Epitope Specificity	71-163/163
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Secreted.
SIMILARITY	Belongs to the IL-17 family.
SUBUNIT	Homodimer; disulfide-linked.
DISEASE	Defects in IL17F are the cause of familial candidiasis type 6 (CANDF6) [MIM:613956]. CANDF6 is a rare disorder with altered immune responses and impaired clearance of fungal infections, selective against Candida. It is characterized by persistent and/or recurrent infections of the skin, nails and mucous membranes caused by organisms of the genus Candida, mainly Candida albicans.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	IL-17F is a member of IL-17 family of structurallyrelated cytokines that share a highly conserved C-terminal region, but differ from one another in their N-terminal regions and in their distinct biological roles. IL-17F is a homodimer of two 133 amino acid chains that are secreted by activated CD4+ Tcells and activated monocytes. The biological activities mediated by IL-17F are similar to those of IL-17. IL-17F stimulates the production of other cytokines such as IL-6, IL-8 and granulocyte colony stimulating factor. It can also regulate cartilage matrix turnover, stimulate PBMC and T cell proliferation, and inhibit angiogenesis. This recombinant human IL-17F is produced by human cells. Biological activity: The activity was measured by its ability to induce IL-6 expression in the NHDF adult fibroblasts. Reconstitution: Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein in sterile PBS containing 0.1% endotoxin-free recombinant human serum albumin.

Additional Information

Gene ID	112744

Other Names	CANDF6; IL-17F; IL17A; ML-1; ML1; IL17F_HUMAN; IL17F; Cytokine ML-1; interleukin 17F
Target/Specificity	Expressed in activated, but not resting, CD4+ T-cells and activated monocytes.
Dilution	WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	IL17F
Function	Effector cytokine of innate and adaptive immune system involved in antimicrobial host defense and maintenance of tissue integrity (PubMed:21350122). IL17A-IL17F signals via IL17RA-IL17RC heterodimeric receptor complex, triggering homotypic interaction of IL17RA and IL17RC chains with TRAF3IP2 adapter through SEFIR domains. This leads to downstream TRAF6-mediated activation of NF-kappa-B and MAPkinase pathways ultimately resulting in transcriptional activation of cytokines, chemokines, antimicrobial peptides and matrix metalloproteinases, with potential strong immune inflammation (PubMed:11574464, PubMed:11591732, PubMed:11591768, PubMed:17911633, PubMed:18684971, PubMed:21350122, PubMed:28827714). IL17A-IL17F is primarily involved in host defense against extracellular bacteria and fungi by inducing neutrophilic inflammation (By similarity). As signature effector cytokine of T-helper 17 cells (Th17), primarily induces neutrophil activation and recruitment at infection and inflammatory sites (By similarity). Stimulates the production of antimicrobial beta-defensins DEFB1, DEFB103A, and DEFB104A by mucosal epithelial cells, limiting the entry of microbes through the epithelial barriers (By similarity). IL17F homodimer can signal via IL17RC homodimeric receptor complex, triggering downstream activation of TRAF6 and NF-kappa-B signaling pathway (PubMed:32187518). Via IL17RC induces transcriptional activation of IL33, a potent cytokine that stimulates group 2 innate lymphoid cells and adaptive T-helper 2 cells involved in pulmonary allergic response to fungi. Likely via IL17RC, promotes sympathetic innervation of peripheral organs by coordinating the communication between gamma-delta T cells and parenchymal cells. Stimulates sympathetic innervation of thermogenic adipose tissue by driving TGFB1 expression (By similarity). Regulates the composition of intestinal microbiota and immune tolerance by inducing antimicrobial proteins that specifically control the growth of commensal Firmicutes and Bacteroidetes (By similarity).
Cellular Location	Secreted {ECO:0000250|UniProtKB:Q7TNI7}.
Tissue Location	Expressed in T-helper 1 and T-helper 2 cells, basophils and mast cells.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.