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IL17A Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP12918c

Specification

IL17A Antibody (Center) Blocking peptide - Product Information

Primary Accession Q16552

IL17A Antibody (Center) Blocking peptide - Additional Information

Gene ID 3605

Other Names
Interleukin-17A, IL-17, IL-17A, Cytotoxic T-lymphocyte-associated antigen 8, CTLA-8, IL17A, CTLA8, IL17

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

IL17A Antibody (Center) Blocking peptide - Protein Information

Name IL17A

Synonyms CTLA8, IL17

Function
Effector cytokine of innate and adaptive immune system involved in antimicrobial host defense and maintenance of tissue integrity (PubMed:24120361). Signals via IL17RA-IL17RC heterodimeric receptor complex, triggering homotypic interaction of IL17RA and IL17RC chains with TRAF3IP2 adapter. 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:19825828, PubMed:21350122, PubMed:17911633, PubMed:18684971, PubMed:8676080, PubMed:24120361). Plays an important role in connecting T cell-mediated adaptive immunity and acute inflammatory response to destroy extracellular bacteria and fungi. As a signature effector cytokine of T-helper 17 cells

(Th17), primarily induces neutrophil activation and recruitment at infection and inflammatory sites (By similarity). In airway epithelium, mediates neutrophil chemotaxis via induction of CXCL1 and CXCL5 chemokines (By similarity). In secondary lymphoid organs, contributes to germinal center formation by regulating the chemotactic response of B cells to CXCL12 and CXCL13, enhancing retention of B cells within the germinal centers, B cell somatic hypermutation rate and selection toward plasma cells (By similarity). Effector cytokine of a subset of gamma-delta T cells that functions as part of an inflammatory circuit downstream IL1B, TLR2 and IL23A-IL12B to promote neutrophil recruitment for efficient bacterial clearance (By similarity). Effector cytokine of innate immune cells including invariant natural killer cell (iNKT) and group 3 innate lymphoid cells that mediate initial neutrophilic inflammation (By similarity). Involved in the maintenance of the integrity of epithelial barriers during homeostasis and pathogen infection (PubMed:21350122). Upon acute injury, has a direct role in epithelial barrier formation by regulating OCLN localization and tight junction biogenesis (By similarity). As part of the mucosal immune response induced by commensal bacteria, enhances host's ability to resist pathogenic bacterial and fungal infections by promoting neutrophil recruitment and antimicrobial peptides release (By similarity). In synergy with IL17F, mediates 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). Involved in antiviral host defense through various mechanisms (By similarity). Enhances immunity against West Nile virus by promoting T cell cytotoxicity (By similarity). May play a beneficial role in influenza A virus (H5N1) infection by enhancing B cell recruitment and immune response in the lung (By similarity). Contributes to influenza A virus (H1N1) clearance by driving the differentiation of B-1a B cells, providing for production of virus- specific IgM antibodies at first line of host defense (By similarity).

Cellular Location
Secreted

Tissue Location
Expressed in memory Th17 cells (at protein level).

IL17A Antibody (Center) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

IL17A Antibody (Center) Blocking peptide - Images

IL17A Antibody (Center) Blocking peptide - Background

The protein encoded by this gene is a proinflammatorycytokine produced by activated T cells. This cytokine regulates theactivities of NF-kappaB and mitogen-activated protein kinases. Thiscytokine can stimulate the expression of IL6 and cyclooxygenase-2(PTGS2/COX-2), as well as enhance the production of nitric oxide(NO). High levels of this cytokine are associated with severalchronic inflammatory diseases including rheumatoid arthritis,psoriasis and multiple sclerosis.

IL17A Antibody (Center) Blocking peptide - References

Chen, X., et al. Cancer Sci. 101(11):2384-2390(2010)Dart, M.L., et al. Circ. Res. 107(9):1106-1116(2010)Marwaha, A.K., et al. J. Immunol. 185(7):3814-3818(2010)Crome, S.Q., et al. J. Immunol. 185(6):3199-3208(2010)Weng, X.M., et al. Zhonghua Shi Yan He Lin Chuang Bing Du Xue Za Zhi 24(1):42-44(2010)