Active Interleukin 17 (IL17)

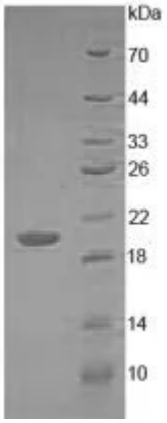
Catalog#:PEH12102

概述（Summary）

别称（Alternative Names）	IL17A; CTLA8; IL-17A; Cytotoxic T-Lymphocyte-Associated Protein 8
纯度（Purity）	Greater than 97% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Ile20-Ala155】
Accession #	Q16552
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	19.5 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 20mM Tris, 150mM NaCl (PH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Effector cytokine of innate and adaptive immune system involved in antimicrobial host defense and maintenance of tissue integrity. 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. 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. In airway epithelium, mediates neutrophil chemotaxis via induction of CXCL1 and CXCL5 chemokines. 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. 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. Effector cytokine of innate immune cells including invariant natural killer cell (iNKT) and group 3 innate lymphoid cells that mediate initial neutrophilic inflammation. Involved in the maintenance of the integrity of epithelial barriers during homeostasis and pathogen infection. Upon acute injury, has a direct role in epithelial barrier formation by regulating OCLN localization and tight junction biogenesis. 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. 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. Involved in antiviral host defense through various mechanisms. Enhances immunity against West Nile virus by promoting T cell cytotoxicity. May play a beneficial role in influenza A virus (H5N1) infection by enhancing B cell recruitment and immune response in the lung. 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.

电泳图（SDS-PAGE image）



Greater than 97% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

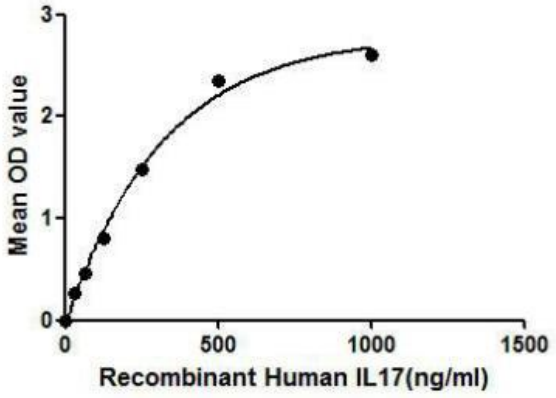


Figure 1. The binding activity of IL17 with IL17RA.

IL17 (interleukin 17) is a member of IL17 cytokine family, which is a proinflammatory cytokine produced by activated T cells. This cytokine regulates the activities of NF-kappaB and mitogen-activated protein kinases. It is reported that IL17 is a ligand for IL17RA, indicating its interaction with IL17RA. Thus, a binding ELISA assay was constructed to detect the association of recombinant human IL17 with recombinant human IL17RA. Briefly, IL17 were diluted serially in PBS with 0.1%BSA (pH 7.4). Duplicate samples of 100uL were then transferred to IL17RA-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-IL17 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution , wells were incubated 15-25 minutes at 37°C. Finally, add 50μL stop solution to the wells and read at 450nm immediately. The binding activity of IL17 with IL17RA was shown in Figure 1 and this effect was in a dose dependent manner.

注意事项（Note）

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