Active Interleukin 17 Receptor A (IL17RA)

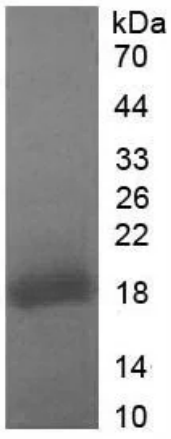
Catalog#:PEH12714

概述（Summary）

别称（Alternative Names）	CDw217; CD217; IL17R-A; IL17-RA; IL17R-A; IL17R; HIL-17R
纯度（Purity）	Greater than 90% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Pro377-Phe534】
Accession #	Q96F46
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	19.0 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）	Receptor for IL17A and IL17F, major effector cytokines of innate and adaptive immune system involved in antimicrobial host defense and maintenance of tissue integrity. Receptor for IL17A. Receptor for IL17F. Binds to IL17A with higher affinity than to IL17F. Binds IL17A and IL17F homodimers as part of a heterodimeric complex with IL17RC. Also binds heterodimers formed by IL17A and IL17F as part of a heterodimeric complex with IL17RC. Cytokine binding triggers homotypic interaction of IL17RA and IL17RC chains with TRAF3IP2 adapter, leading to 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. Involved in antimicrobial host defense primarily promoting neutrophil activation and recruitment at infection sites to destroy extracellular bacteria and fungi. 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. Plays a role in the maintenance of the integrity of epithelial barriers during homeostasis and pathogen infection. Stimulates 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. Contributes to Influenza virus clearance by driving the differentiation of B-1a B cells, providing for production of virus-specific IgM antibodies at first line of host defense. Receptor for IL17C as part of a heterodimeric complex with IL17RE.; (Microbial infection) Receptor for SARS coronavirus-2/SARS-CoV-2 virus protein ORF8, leading to IL17 pathway activation and an increased secretion of pro-inflammatory factors through activating NF-kappa-B signaling pathway.

电泳图（SDS-PAGE image）



Greater than 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

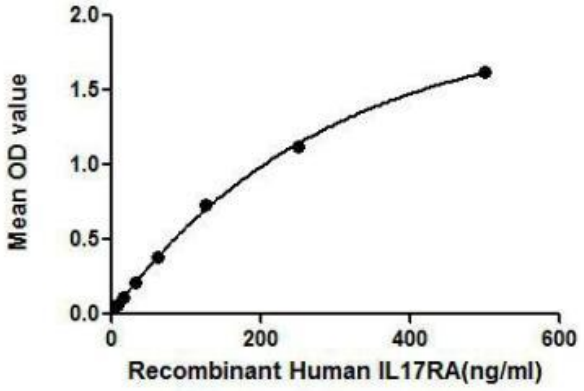


Figure 1. The binding activity of IL17RA with IL17.

Interleukin-17 receptor A (IL17RA) is a cytokine receptor which binds interleukin 17A (IL17A). IL17A is a proinflammatory cytokine secreted by activated T-lymphocytes. IL17RA, as a transmembrane protein, is a ubiquitous type I membrane glycoprotein that binds IL17A, IL17F and IL17C. Activation of IL17RA leads to induction of expression of inflammatory chemokines and cytokines such as CXCL1, CXCL8/IL8 and IL6. Thus a binding ELISA assay was constructed to detect the association of recombinant human IL17RA with recombinant human IL17A. Briefly, IL17RA were diluted serially in PBS, with 0.01%BSA (pH 7.4). Duplicate samples of 100uL were then transferred to IL17A-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-IL17RA 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 IL17RA with IL17A was shown in Figure 1 and this effect was in a dose dependent manner.

注意事项（Note）

For Research Use Only , Not for Diagnostic Use.