

HUMAN IL17A PROTEIN, HFC TAG

Cat.#: 11654

Product Name: Human IL17A Protein

Size : 10 µg, 50 µg and 100 µg

Synonyms: CTLA-8;CTLA8;IL-17;IL-17A;IL17;ILA17

Target: IL17A

UNIPROT ID: Q16552

Description: Recombinant Human IL17A Protein with C-terminal human Fc tag

Background: This gene is a member of the IL-17 receptor family which includes five members (IL-17RA-E) and the encoded protein is a proinflammatory cytokine produced by activated T cells. IL-17A-mediated downstream pathways induce the production of inflammatory molecules, chemokines, antimicrobial peptides, and remodeling proteins. The encoded protein elicits crucial impacts on host defense, cell trafficking, immune modulation, and tissue repair, with a key role in the induction of innate immune defenses. This cytokine stimulates non-hematopoietic cells and promotes chemokine production thereby attracting myeloid cells to inflammatory sites. This cytokine also regulates the activities of NF-kappaB and mitogen-activated protein kinases and can stimulate the expression of IL6 and cyclooxygenase-2 (PTGS2/COX-2), as well as enhance the production of nitric oxide (NO). IL-17A plays a pivotal role in various infectious diseases, inflammatory and autoimmune disorders, and cancer. High levels of this cytokine are associated with several chronic inflammatory diseases including rheumatoid arthritis, psoriasis and multiple sclerosis. The lung damage induced by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is to a large extent, a result of the inflammatory response promoted by cytokines such as IL17A. [provided by RefSeq, Sep 2020]

Species/Host: HEK293

Molecular Weight: The protein has a predicted molecular mass of 41.3 kDa after removal of the signal peptide. The apparent molecular mass of IL17A-hFc is approximately 35-55 kDa due to glycosylation.

Molecular Characterization: IL17A(Gly24-Ala155) hFc(Glu99-Ala330)

Purity: The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

Formulation & Reconstitution: Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

Storage & Shipping: Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

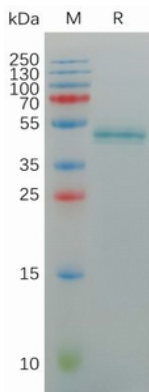


Figure 1. Human IL17A Protein, hFc Tag on SDS-PAGE under reducing condition.

Human IL17A, hFc Tagged protein ELISA

0.2 µg of Human IL17A, hFc tagged protein per well

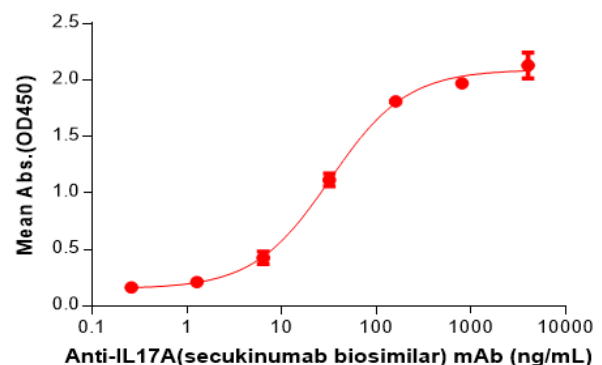


Figure 2. ELISA plate pre-coated by 2 µg/ml (100 µl/well) Human IL17A Protein, hFc Tag(11654) can bind Anti-IL17A(secukinumab biosimilar) mAb(28131) in a linear range of 6.40-160 ng/mL.