

RP01534

Leader in Biomolecular Solutions for Life Science



Recombinant Human IL-17A/CTLA-8 Protein

Catalog No.: RP01534 **Recombinant**

Sequence Information

Species	Gene ID	Swiss Prot
<I>Pichia</I>	/I3605	Q16552

Tags

No tag

Synonyms

IL17A; CTLA-8; CTLA8; IL-17; IL-17A; IL17; interleukin-17A;CTLA-8;CTLA8;IL-17;IL-17A;IL17

Product Information

Source	Purification
<I>Pichia</I>	≥ 95 % as determined by SDS-PAGE.

Endotoxin

< 0.1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact



www.abclonal.com

Background

IL17, also known as IL17a, is a cytokine that belongs to the IL-17 family. Cytokines are proteinaceous signaling compounds that are major mediators of the immune response. They control many different cellular functions including proliferation, differentiation, and cell survival/apoptosis but are also involved in several pathophysiological processes including viral infections and autoimmune diseases. Cytokines are synthesized under various stimuli by a variety of cells of both the innate (monocytes, macrophages, dendritic cells) and adaptive (T- and B-cells) immune systems. The IL-17 family of cytokines includes six members, IL-17/IL-17A, IL-17B, IL-17C, IL-17D, IL-17E/IL-25, and IL-17F, which are produced by multiple cell types. IL-17 regulates the activities of NF-kappaB and mitogen-activated protein kinases. This cytokine 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 IL-17 are associated with several chronic inflammatory diseases including rheumatoid arthritis, psoriasis, and multiple sclerosis.

Basic Information

Description

Recombinant Human IL-17A/CTLA-8 Protein is produced by *Pichia* expression system. The target protein is expressed with sequence (Ile20-Ala155) of human IL-17A/CTLA-8 (Accession #NP_002181.1) fused with no additional amino acid.

Bio-Activity

1. Measured by its ability to induce IL-6 secretion by HeLa human cervical epithelial carcinoma cells. The ED₅₀ for this effect is 6.72-26.88 ng/mL. 2. Measured by its binding ability in a functional ELISA. Immobilized Human IL17RA at 1 μg/mL (100 μL/well) can bind Human IL17A with a linear range of 0.1-13.3 ng/mL.

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Operational Notes

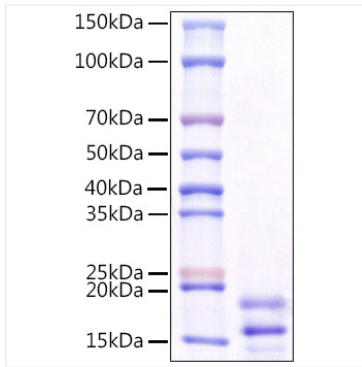
For your safety and health, please wear a lab coat and disposable gloves for handling.

Storage

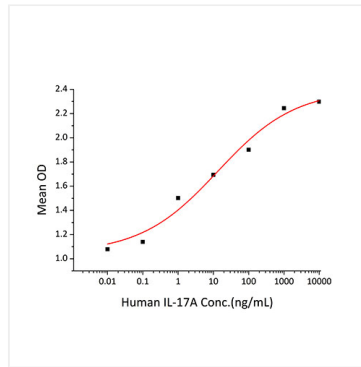
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

* For your safety and health, please wear a lab coat and disposable gloves when handling.

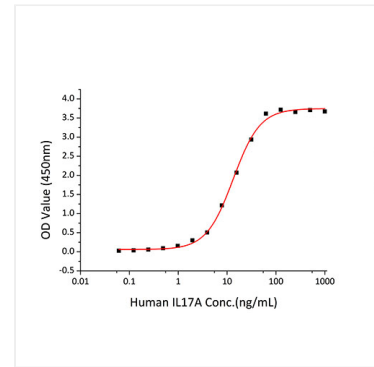
Validation Data



Recombinant Human IL-17A/CTLA-8 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Recombinant Human IL-17A induces IL-6 secretion by HeLa human cervical epithelial carcinoma cells. The ED_{50} for this effect is 6.72-26.88 ng/mL.



Immobilized Human IL17RA at 1 μ g/mL (100 μ L/well) can bind Human IL17A with a linear range of 0.1-13.3 ng/mL.