

## Synonym

IL-17A,Interleukin-17A,CTLA-8,IL-17

#### Source

Human IL17A, premium grade(ILA-H5219) is expressed from human 293 cells (HEK293). It contains AA Gly 24 - Ala 155 (Accession # Q16552-1). Predicted N-terminus: Gly 24

It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials use in cell manufacturing of cell-based therapies.

## **Molecular Characterization**

IL-17A(Gly 24 - Ala 155) Q16552-1

This protein carries no "tag".

The protein has a calculated MW of 15.1 kDa. The protein migrates as 16 kDa, 17 kDa and 19 kDa under reducing (R) condition, and 27-34 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

## Endotoxin

Less than 0.1 EU per  $\mu g$  by the LAL method / rFC method.

## **Sterility**

Negative

## Mycoplasma

Negative

#### **Purity**

>90% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

#### **Storage**

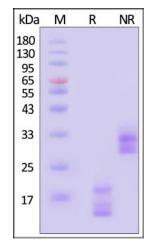
For long term storage, the product should be stored at lyophilized state at  $-20^{\circ}$ C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

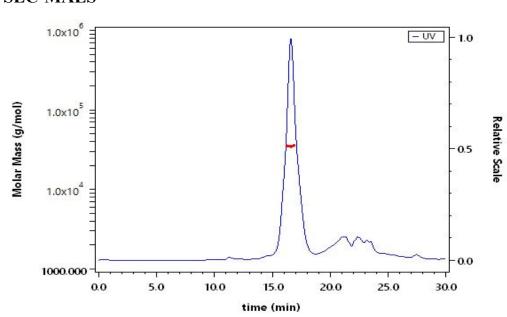
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## **SDS-PAGE**



Human IL17A, premium grade on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

# SEC-MALS





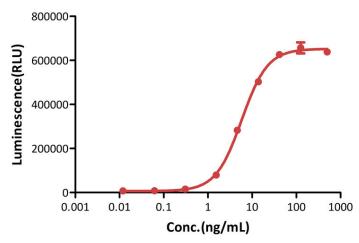


The purity of Human IL17A, premium grade (Cat. No. ILA-H5219) is more than 95% and the molecular weight of this protein is around 30-46 kDa verified by SEC-MALS.

Report

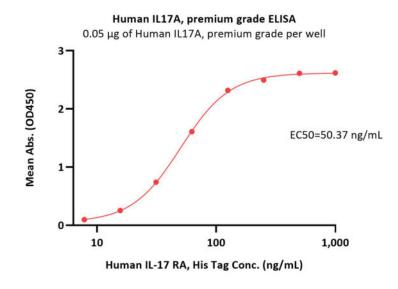
## **Bioactivity-CELL BASE**

# Human IL-17A Protein, premium grade stimulates Human IL-17 RA/IL-17 RC (Luc) HEK293 Reporter Cell



Human IL-17A, premium grade (Cat. No. ILA-H5219) stimulates Human IL-17 RA/IL-17 RC (Luc) HEK293 Reporter Cell. The specific activity of Human IL-17A, premium grade is > 1.00x10^7 IU/mg, which is calibrated against human IL-17 WHO International Standard (NIBSC code: 01/420) (QC tested).

## **Bioactivity-ELISA**



Immobilized Human IL17A, premium grade (Cat. No. ILA-H5219) at 0.5  $\mu$ g/mL (100  $\mu$ L/well) can bind Human IL-17 RA, His Tag (Cat. No. ILA-H5222) with a linear range of 8-125 ng/mL (QC tested).

## **Background**

Interleukin-17A (IL17A) is also known as cytotoxic T-lymphocyte-associated antigen 8 (CTLA8), which is a proinflammatory cytokine produced by activated T cells. IL17A can regulate the activities of NF-kappaB and mitogen-activated protein kinases. Also, IL17A can stimulate the expression of IL6 and cyclooxygenase-2 (PTGS2/COX-2), as well as enhance the production of nitric oxide (NO). Furthermore, IL17A has been found both in glycosylated and nonglycosylated forms. High levels of IL-17 are associated with several chronic inflammatory diseases including rheumatoid arthritis, psoriasis and multiple sclerosis.

