Catalog # ILA-H82Q1



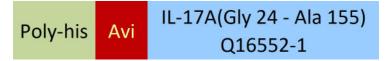
### Synonym

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

### Source

Biotinylated Human IL17A, His, Avitag(ILA-H82Q1) is expressed from human 293 cells (HEK293). It contains AA Gly 24 - Ala 155 (Accession # <u>Q16552-1</u>). Predicted N-terminus: His

# **Molecular Characterization**



This protein carries a polyhistidine tag at the N-terminus, followed by an Avi tag (Avitag<sup>TM</sup>).

The protein has a calculated MW of 17.8 kDa. The protein migrates as 18-21 kDa and 23-25 kDa when calibrated against <u>Star Ribbon Pre-stained Protein</u> <u>Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

# Labeling

Biotinylation of this product is performed using Avitag<sup>™</sup> technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

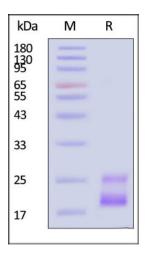
# **Protein Ratio**

Passed as determined by the HABA assay / binding ELISA.

# Endotoxin

Less than 1.0 EU per  $\mu g$  by the LAL method.

# **SDS-PAGE**



# Biotinylated Human IL17A, His, Avitag on SDS-PAGE under reducing (R)

# Purity

>90% as determined by SDS-PAGE.

### 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°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.

condition. 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>).

**Bioactivity-ELISA** 

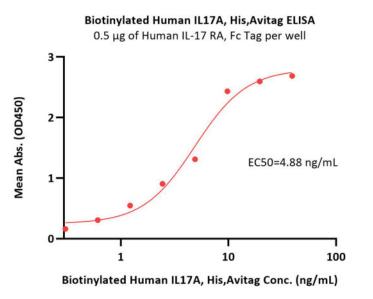


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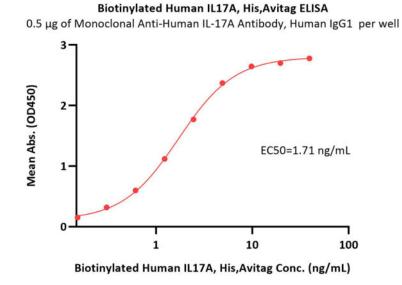
6/11/2024



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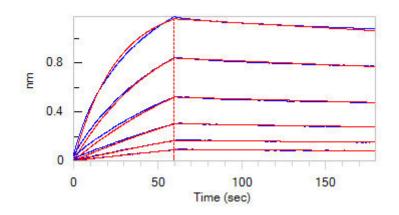


Immobilized Human IL-17 RA, Fc Tag at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Human IL17A, His,Avitag (Cat. No. ILA-H82Q1) with a linear range of 0.3-10 ng/mL (QC tested).



Immobilized Monoclonal Anti-Human IL-17A Antibody, Human IgG1 at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Human IL17A, His,Avitag (Cat. No. ILA-H82Q1) with a linear range of 0.3-2 ng/mL (Routinely tested).

# **Bioactivity-BLI**



Loaded Biotinylated Human IL17A, His, Avitag (Cat. No. ILA-H82Q1) on SA Biosensor, can bind Human IL-17 RA, His Tag (Cat. No. ILA-H5222) with an affinity constant of 18.8 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely 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.

# **Clinical and Translational Updates**



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