

Synonym

IL-17A,Interleukin-17A,CTLA-8,IL-17,IL-17F,Interleukin-17F,Cytokine ML-1,IL17A&IL17F

Source

Biotinylated Human IL-17A&IL-17F, Avitag, His Tag(ILF-H82W1) is expressed from human 293 cells (HEK293). It contains AA Gly 24 - Ala 155 (IL-17A) & Arg 31 - Gln 163 (IL-17F) (Accession # Q16552-1 (IL-17A) & Q96PD4-1 (IL-17F)).

Predicted N-terminus: Gly 24

Molecular Characterization

IL-17A (Gly 24 - Ala 155) Q16552-1	IL-17F (Arg 31 - Gln 163) Q96PD4-1	Avi	His
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Subunit IL-17A&IL-17F is fused with an Avi tag (AvitagTM) at the C-terminus, followed by a polyhistidine tag. The protein has a calculated MW of 34.1 kDa. The protein migrates as 40-43 kDa when calibrated against <u>Star Ribbon Prestained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using AvitagTM 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 µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm 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

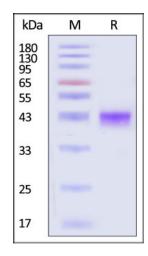
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

SDS-PAGE

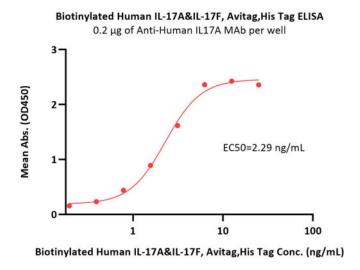


Biotinylated Human IL-17A&IL-17F, Avitag, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

Bioactivity-ELISA

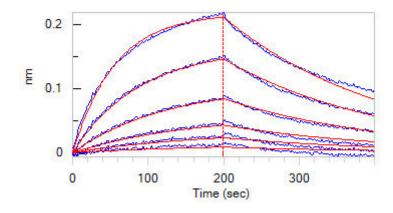




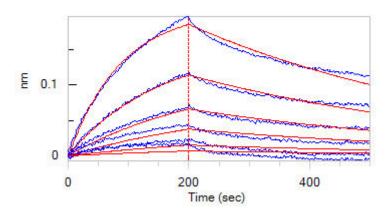


Immobilized Anti-Human IL17A MAb at 2 μ g/mL (100 μ L/well) can bind Biotinylated Human IL-17A&IL-17F, Avitag,His Tag (Cat. No. ILF-H82W1) with a linear range of 0.2-6 ng/mL (QC tested).

Bioactivity-BLI



Loaded Biotinylated Human IL-17A&IL-17F, Avitag, His Tag (Cat. No. ILF-H82W1) on SA Biosensor, can bind Human IL-17 RA, His Tag (Cat. No. ILA-H5222) with an affinity constant of 352 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Biotinylated Human IL-17A&IL-17F, Avitag, His Tag (Cat. No. ILF-H82W1) on SA Biosensor, can bind uman IL-17 RC, Fc Tag (Cat. No. ILC-H5259) with an affinity constant of 217 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

