

Synonym

CD217,CDw217,IL-17RA,IL17R,CANDF5,hIL-17R

Source

Biotinylated Human IL-17 RA, Fc,Avitag(ILA-H82F1) is expressed from human 293 cells (HEK293). It contains AA Leu 33 - Trp 320 (Accession # Q96F46-1). Predicted N-terminus: Leu 33

Molecular Characterization



This protein carries a human IgG1 Fc tag at the C-terminus, followed by an Avi tag (AvitagTM)

The protein has a calculated MW of 61.9 kDa. The protein migrates as 80-115 kDa under reducing (R) condition, and 150-200 kDa under non-reducing (NR) 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

Tris with Glycine, Arginine and NaCl, pH7.5 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

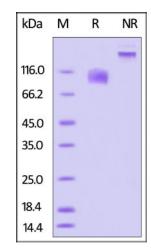
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

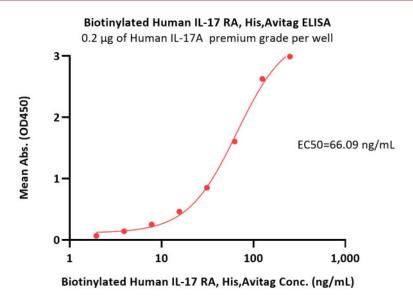
SDS-PAGE



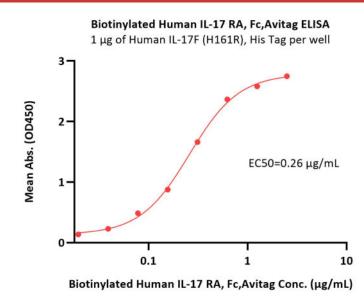
Biotinylated Human IL-17 RA, Fc, Avitag on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



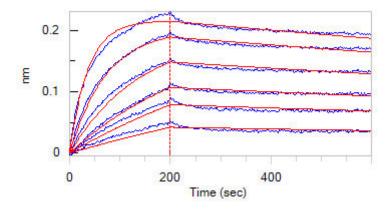


Immobilized Human IL17A Protein, premium grade (Cat. No. ILA-H5219) at 2 μ g/mL (100 μ L/well) can bind Biotinylated Human IL-17 RA, Fc,Avitag (Cat. No. ILA-H82F1) with a linear range of 2-125 ng/mL (QC tested).



Immobilized Human IL-17F (H161R), His Tag (Cat. No. ILF-H4240) at 10 μ g/mL (100 μ L/well) can bind Biotinylated Human IL-17 RA, Fc,Avitag (Cat. No. ILA-H82F1) with a linear range of 0.02-0.313 μ g/mL (Routinely tested).

Bioactivity-BLI



Loaded Biotinylated Human IL-17 RA, Fc, Avitag (Cat. No. ILA-H82F1) on SA Biosensor, can bind Human IL17A, Tag Free with an affinity constant of 1.29 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Interleukin 17 receptor A (IL17RA) is also known as cluster of differentiation w217 (CDw217), is a pro-inflammatory cytokine secreted by activated T-lymphocytes, belong to ubiquitous type I membrane glycoprotein, and binds with low affinity to interleukin 17A (IL17A). IL 17R mRNA exhibits a broad tissue distribution, and has been detected in virtually all cells and tissues tested . IL 17RA associates with IL 17RC to form a signaling receptor complex for IL 17 and IL 17F . Ligand and IL 17RA ligation promotes T cell activation and the production of IL - 6, G-CSF, SCF, and multiple pro-inflammatory chemokines. Defects in IL17RA are the cause of familial candidiasis type 5 (CANDF5).

Clinical and Translational Updates

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.