Biotinylated Human APRIL / TNFSF13 Protein, Fc,Avitag™

Catalog # APL-H82F5

Synonym

APRIL,TNFSF13,TALL-2,TRDL-1,CD256,TALL2,ZTNF2

Source

Biotinylated Human APRIL, Fc,Avitag(APL-H82F5) is expressed from human 293 cells (HEK293). It contains AA Ala 105 - Leu 250 (Accession # O75888-1).
Predicted N-terminus: Pro

Molecular Characterization

This protein carries a human IgG1 Fc tag at the N-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 44.6 kDa. The protein migrates as 45-50 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ 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

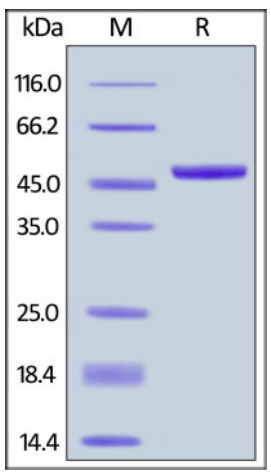
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

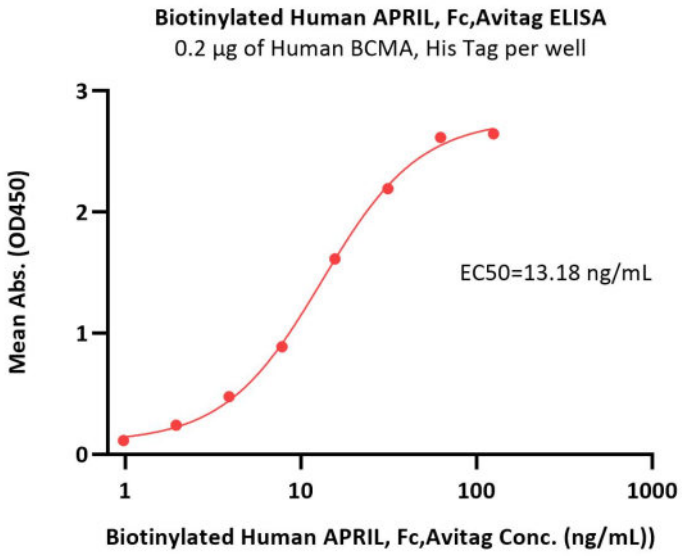
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

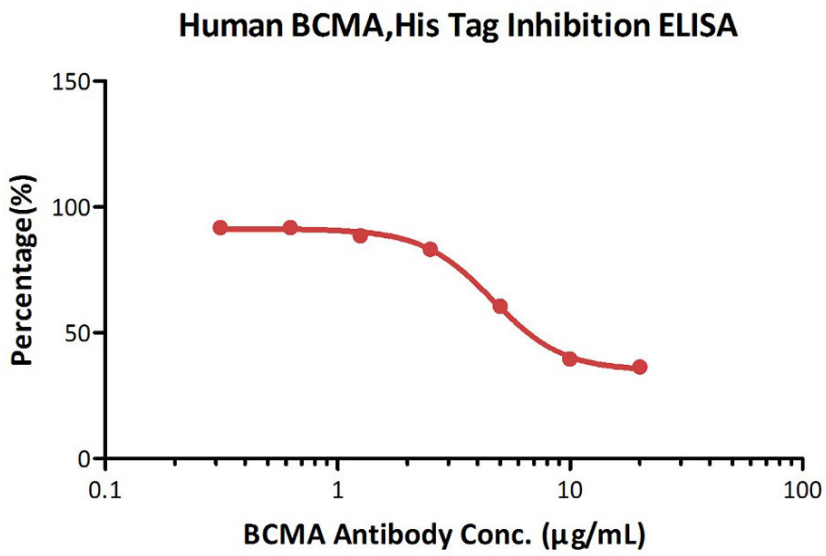


Biotinylated Human APRIL, Fc,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

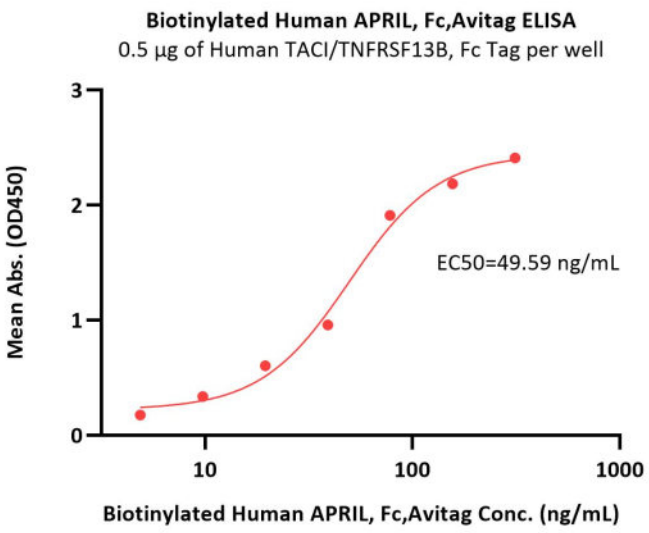
Bioactivity-ELISA



Immobilized Human BCMA, His Tag (Cat. No. BCA-H522y) at 2 μg/mL (100 μL/well) can bind Biotinylated Human APRIL, Fc,Avitag (Cat. No. APL-H82F5) with a linear range of 1-20 ng/mL (QC tested).



Immobilized Human BCMA, His Tag (Cat. No. BCA-H522y) at 2 μg/mL (100 μL/well) can bind pre-mixed increasing concentrations of Anti-BCMA MAb (Mouse IgG1, the antibody was co developed by SCT and ACROBiosystems) and 0.05 μg/mL (100 μL/well) Biotinylated Human APRIL, Fc,Avitag (Cat. No. APL-H82F5) with a half maximal inhibitory concentration (IC50) of 4.624 μg/mL (Routinely tested).



Immobilized Human TACI/TNFRSF13B, Fc Tag at 5 μg/mL (100 μL/well) can bind Biotinylated Human APRIL, Fc,Avitag (Cat. No. APL-H82F5) with a linear range of 5-78 ng/mL (Routinely tested).

Background

APRIL(a proliferation-inducing ligand) is also known as Tumor necrosis factor ligand superfamily member 13, TALL-2, TRDL-1, CD256, TNFFSF 13, cytokine that binds to TNFRSF13B/TACI and to TNFRSF17/BCMA. APRIL is a cytokine of the tumor necrosis factor family associated mainly with hematologic malignancies. The closely related TNF family ligands B cell activation factor (BAFF) and a proliferation-inducing ligand (APRIL) serve in the generation and maintenance of mature B-lymphocytes. Both BAFF and APRIL assemble as homotrimers that bind and activate several receptors that they partially share. BAFF-APRIL heteromers of different stoichiometries have distinct receptor-binding properties and activities. In addition, expression of APRIL was regulated by miR-145 in GC cells.

Clinical and Translational Updates