Biotinylated Cynomolgus APRIL / TNFSF13 Protein, Avitag™,His Tag, low endotoxin (MALS verified)

Catalog # APL-C82Q3

Synonyms

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

Source

Biotinylated Cynomolgus APRIL Protein, Avitag,His Tag (APL-C82Q3) is expressed from human 293 cells (HEK293). It contains AA Gln 111 - Leu 250 (Accession # XP_005582818.1).

Predicted N-terminus: Gly

Molecular Characterization

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

The protein has a calculated MW of 50.9 kDa. The protein migrates as 55-65 kDa when calibrated against Star Ribbon Pre-stained Protein Marker 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 0.01 EU per μg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

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.

Shipping and Storage

This product is shipped at ambient temperature.

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

Please avoid repeated freeze-thaw cycles.

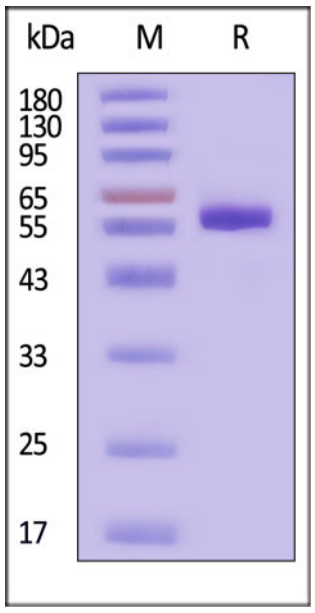
This product is stable after storage at:

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

ACRO Quality Management System

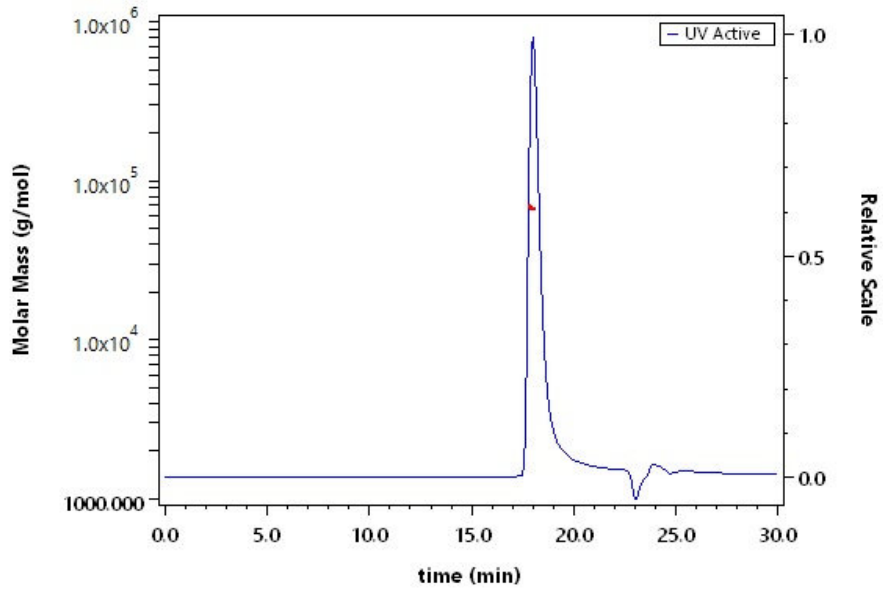
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE



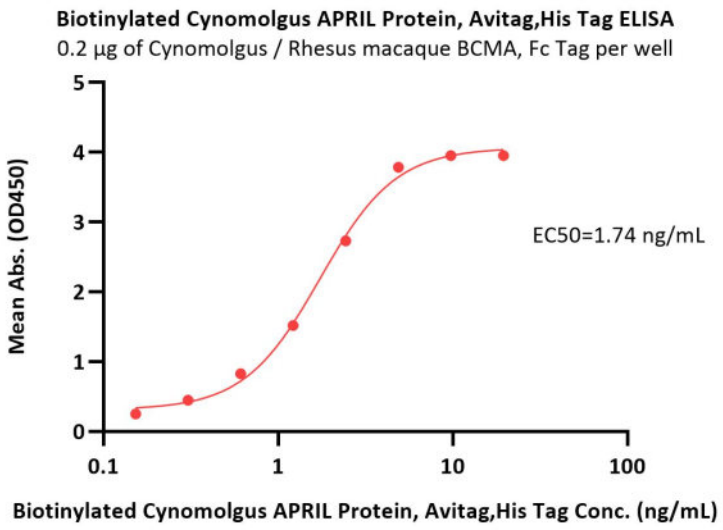
Biotinylated Cynomolgus APRIL Protein, Avitag,His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS

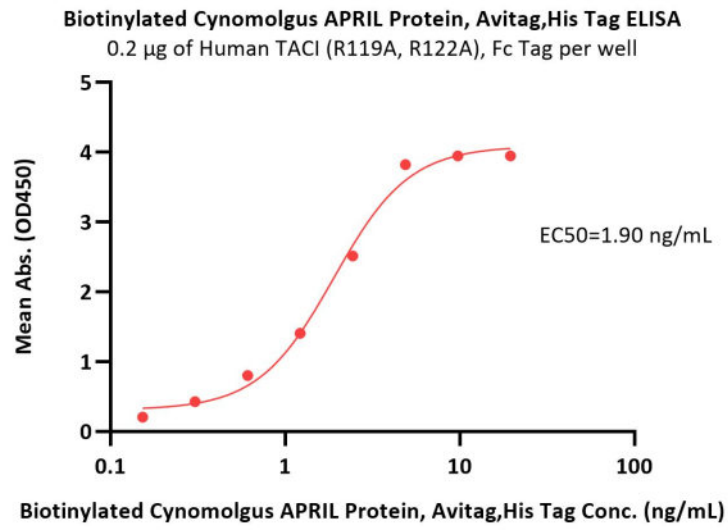


The purity of Biotinylated Cynomolgus APRIL Protein, Avitag,His Tag (Cat. No. APL-C82Q3) is more than 95% and the molecular weight of this protein is around 50-70 kDa verified by SEC-MALS.

Bioactivity-ELISA

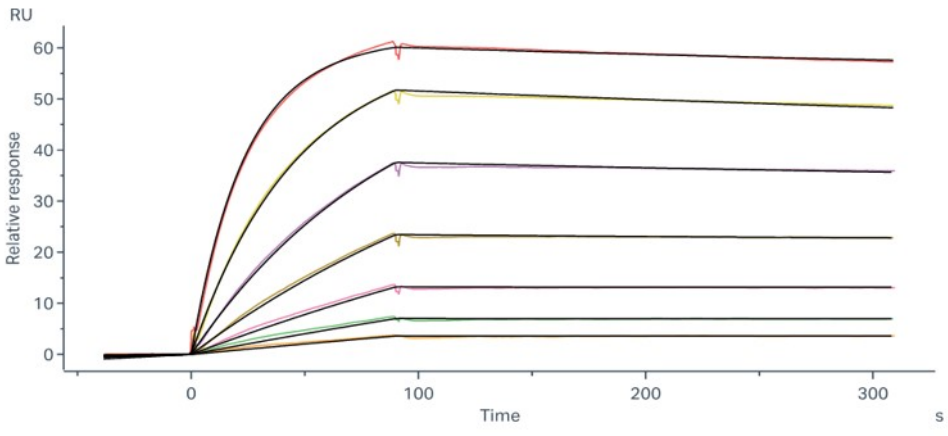


Immobilized Cynomolgus / Rhesus macaque BCMA, Fc Tag (Cat. No. BCA-C5253) at 2 μg/mL (100 μL/well) can bind Biotinylated Cynomolgus APRIL Protein, Avitag,His Tag (Cat. No. APL-C82Q3) with a linear range of 0.2-5 ng/mL (QC tested).



Immobilized Human TACI (R119A, R122A), Fc Tag (Cat. No. TAI-H5253) at 2 μg/mL (100 μL/well) can bind Biotinylated Cynomolgus APRIL Protein, Avitag,His Tag (Cat. No. APL-C82Q3) with a linear range of 0.2-5 ng/mL (QC tested).

Bioactivity-SPR



Biotinylated Cynomolgus APRIL Protein, Avitag,His Tag(Cat. No. APL-C82Q3) immobilized on SA Chip can bind Cynomolgus / Rhesus macaque BCMA Protein, Fc Tag (Cat. No. BCA-C5253) with an affinity constant of 0.183 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

APRIL(a proliferation-inducing ligand) is also known as Tumor necrosis factor ligand superfamily member 13, TALL-2, TRDL-1, CD256, TNFSF13, 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.