Biotinylated Cynomolgus / Rhesus macaque CD47 Protein, His,Avitag™

Catalog # CD7-C82E3

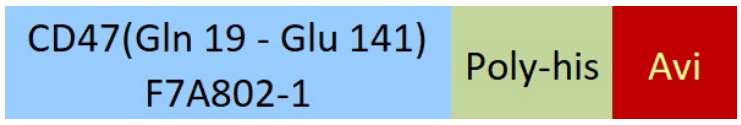
Synonym

CD47,MER6,IAP,OA3

Source

Biotinylated Cynomolgus / Rhesus macaque CD47 Protein, His,Avitag(CD7-C82E3) is expressed from human 293 cells (HEK293). It contains AA Gln 19 - Glu 141 (Accession # F7A802-1).
Predicted N-terminus: Gln 19

Molecular Characterization



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

The protein has a calculated MW of 17.5 kDa. The protein migrates as 35-45 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.

Purity

>90% 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

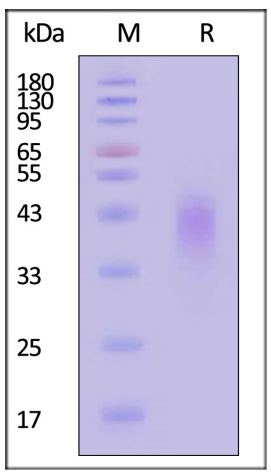
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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 Cynomolgus / Rhesus macaque CD47 Protein, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

Bioactivity-ELISA

Biotinylated Cynomolgus / Rhesus macaque CD47 Protein, His,Avitag™

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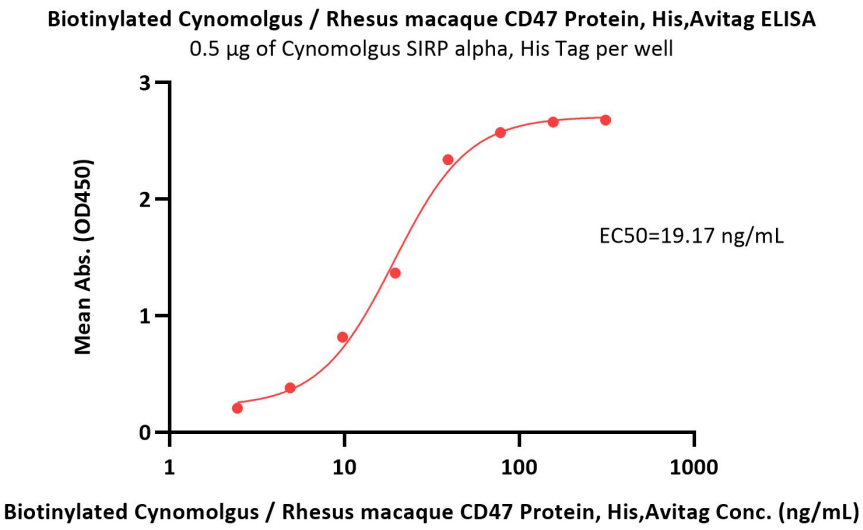
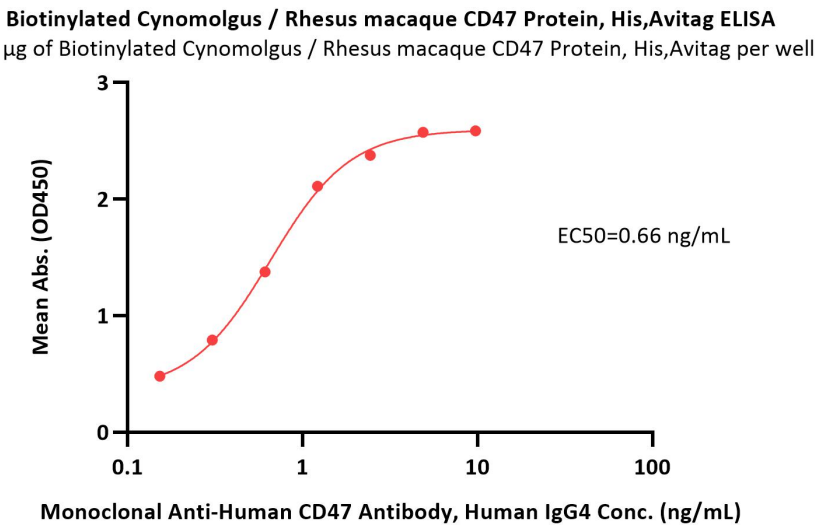
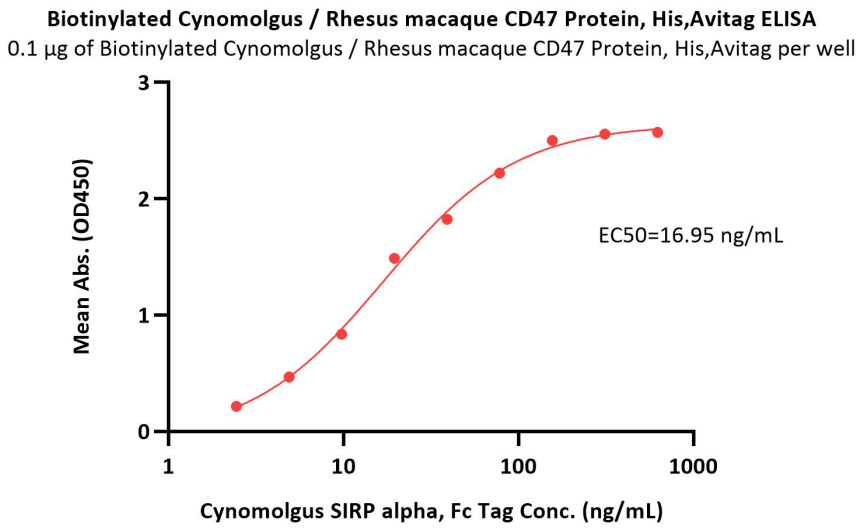


Immobilized Cynomolgus SIRP alpha, His Tag (Cat. No. SIA-C52H7) at 5 μg/mL (100 μL/well) can bind Biotinylated Cynomolgus / Rhesus macaque CD47 Protein, His,Avitag (Cat. No. CD7-C82E3) with a linear range of 2.5-39 ng/mL (Routinely tested).



Immobilized Biotinylated Cynomolgus / Rhesus macaque CD47 Protein, His,Avitag (Cat. No. CD7-C82E3) at 1 μg/mL (100 μL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 μg/well) plate can bind Monoclonal Anti-Human CD47 Antibody, Human IgG4 (Cat. No. CD7-M12) with a linear range of 0.2-1.2 ng/mL (QC tested).



Immobilized Biotinylated Cynomolgus / Rhesus macaque CD47 Protein, His,Avitag (Cat. No. CD7-C82E3) at 1 μg/mL (100 μL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 μg/well) plate can bind Cynomolgus SIRP alpha, Fc Tag (Cat. No. SIA-C5254) with a linear range of 2-39 ng/mL (Routinely tested).

Background

Leukocyte surface antigen CD47 is also known as Antigenic surface determinant protein OA3, Integrin-associated protein (IAP) and Protein MER6. CD47 contains 1 Ig-like V-type (immunoglobulin-like) domain. CD47 is very broadly distributed on normal adult tissues. CD47 has a role in both cell adhesion by acting as an adhesion receptor for THBS1 on platelets, and in the modulation of integrins and plays an important role in memory formation and synaptic plasticity in the hippocampus by similarity. CD47 is the receptor for SIRPA, binding to which prevents maturation of immature dendritic cells and inhibits cytokine production by mature dendritic cells. CD47 Interaction with SIRPG mediates cell-cell adhesion, enhances superantigen-dependent T-cell-mediated proliferation and costimulates T-cell activation.