

# Biotinylated Cynomolgus CLEC7A Protein, His,Avitag™ (MALS verified)

Catalog # CLA-C82Q3



BIOSYSTEMS  
**Acro**

Surprise Inside!

## Synonym

BGR, CANDF4, CD369, CLECSF12, DECTIN1, SCARE2

## Source

Biotinylated Cynomolgus CLEC7A Protein, His,Avitag (CLA-C82Q3) is expressed from human 293 cells (HEK293). It contains AA Thr 100 - Met 281 (Accession # [A0A2K5UXY6](#)).

## Molecular Characterization

Poly-his	Avi	CLEC7A(Thr 100 - Met 281) A0A2K5UXY6
----------	-----	---

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

The protein has a calculated MW of 24.2 kDa. The protein migrates as 28-35 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 Avi tag is enzymatically labeled with biotin.**

## Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

## Purity

>95% as determined by SDS-PAGE.

>90% 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.**

## Storage

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

**Please avoid repeated freeze-thaw cycles.**

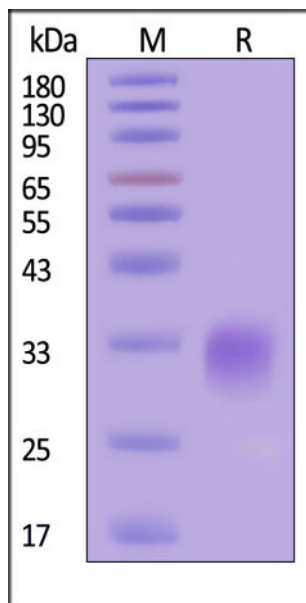
This product is stable after storage at:

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

## ACRO Quality Management System

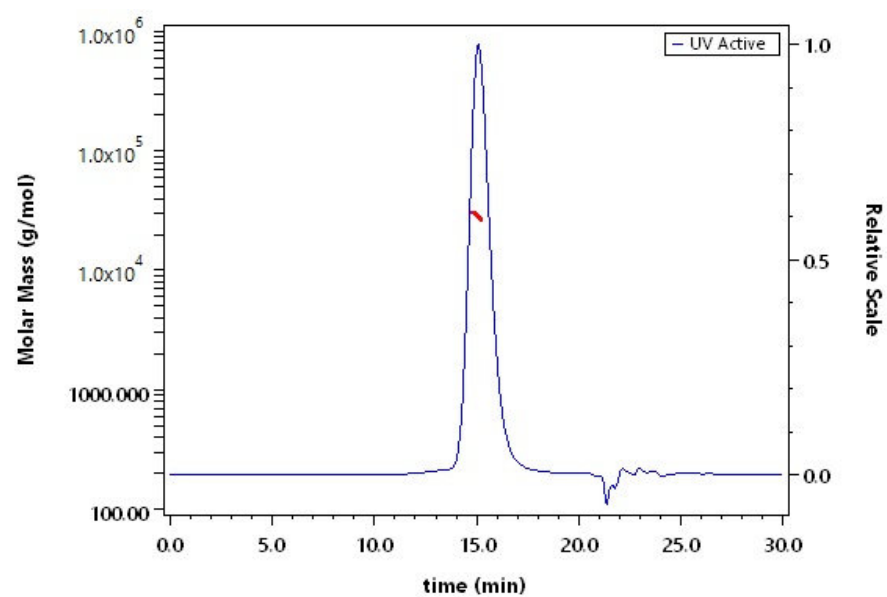
- [QMS\(ISO, GMP\)](#)
- [Quality Advantages](#)
- [Quality Control Process](#)

## SDS-PAGE



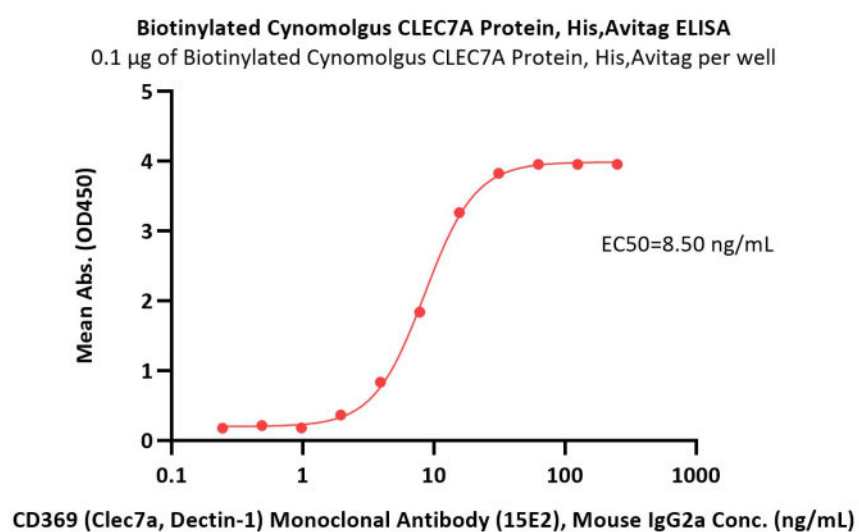
Biotinylated Cynomolgus CLEC7A Protein, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

## SEC-MALS



The purity of Biotinylated Cynomolgus CLEC7A Protein, His,Avitag (Cat. No. CLA-C82Q3) is more than 90% and the molecular weight of this protein is around 25-35 kDa verified by SEC-MALS.

## Bioactivity-ELISA



Immobilized Biotinylated Cynomolgus CLEC7A Protein, His,Avitag (Cat. No. CLA-C82Q3) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 µg/well) plate can bind CD369 (Clec7a, Dectin-1) Monoclonal Antibody (15E2), Mouse IgG2a with a linear range of 0.2-16 ng/mL (QC tested).

## Background

Lectin that functions as pattern recognizing receptor (PRR) specific for beta-1,3-linked and beta-1,6-linked glucans, which constitute cell wall constituents from pathogenic bacteria and fungi (PubMed:11567029, PubMed:12423684).

Necessary for the TLR2-mediated inflammatory response and activation of NF-kappa-B: upon beta-glucan binding, recruits SYK via its ITAM motif and promotes a signaling cascade that activates some CARD domain-BCL10-MALT1 (CBM) signalosomes, leading to the activation of NF-kappa-B and MAP kinase p38 (MAPK11, MAPK12, MAPK13 and/or MAPK14) pathways which stimulate expression of genes encoding pro-inflammatory cytokines and chemokines (By similarity).

Enhances cytokine production in macrophages and dendritic cells (By similarity).

Mediates production of reactive oxygen species in the cell (By similarity).

Mediates phagocytosis of *C.albicans* conidia (PubMed:17230442).

Binds T-cells in a way that does not involve their surface glycans and plays a role in T-cell activation. Stimulates T-cell proliferation. Induces phosphorylation of SCIMP after binding beta-glucans (By similarity).

Discounts, Gifts,  
and more!



[www.acrobiosystems.com](http://www.acrobiosystems.com)

