

Human CLEC7A Protein, His Tag

Catalog # CL7-H5243AI



Application

Human CLEC7A Protein, His Tag AIDD-Ready protein is designed for direct use in SPR assays. It is supplied in a sugar-free, glycerol-free formulation to eliminate refractive index interference in SPR. No desalting or buffer exchange is required before use, simplifying the SPR workflow and supporting high-throughput experimental validation to accelerate the transition from AI prediction to wet-lab validation.

Features and Advantages

- **Directly compatible with SPR:** No desalting or buffer exchange required; supplied as a liquid to reduce sample preparation and improve experimental efficiency.
- **High batch-to-batch consistency:** Each lot is released using SPR QC to ensure experimental reproducibility.
- **Validated with representative drugs:** SPR binding activity is validated using representative drug antibodies to ensure suitability for drug screening and evaluation.

Synonyms

BGR, CANDF4, CD369, CLECSF12, DECTIN1, SCARE2

Source

Human CLEC7A Protein, His Tag (CL7-H5243AI) is expressed from human 293 cells (HEK293). It contains AA Thr 66 - Met 247 (Accession # [Q9BXN2-1](#)).

Molecular Characterization

Poly-His

CLEC7A (Thr 66 - Met 247)
Q9BXN2-1

This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 22.6 kDa. The protein migrates as 33-38 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

Formulation

Supplied as 0.2 µm filtered solution in 10 mM HEPES, 150 mM NaCl, pH7.4.

Contact us for customized product form or formulation.

Shipping and Storage

This product is supplied and shipped on dry ice.

Please avoid repeated freeze-thaw cycles.

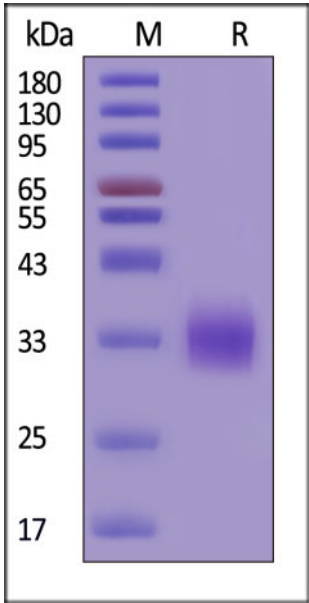
This product is stable after storage at:

- The product **MUST** be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

ACRO Quality Management System

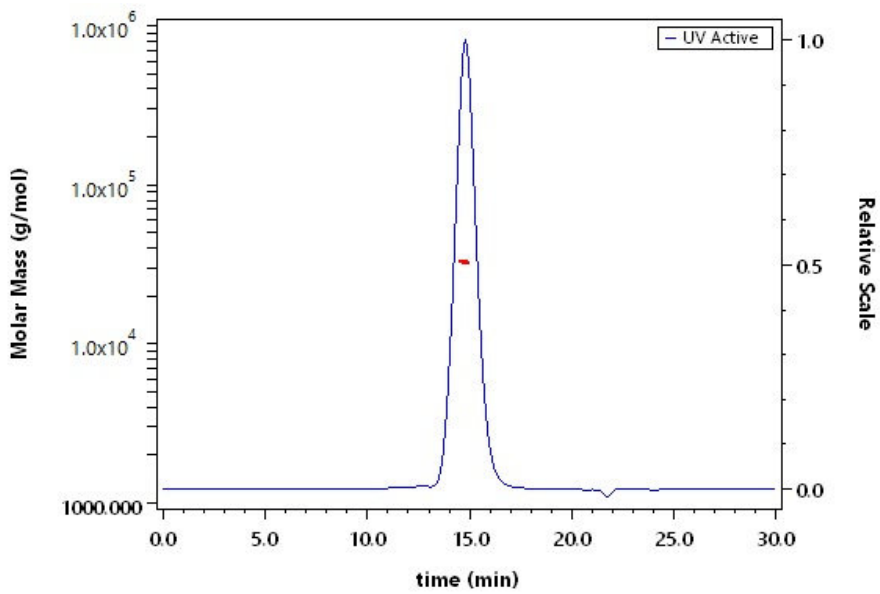
- [QMS\(ISO, GMP\)](#).
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



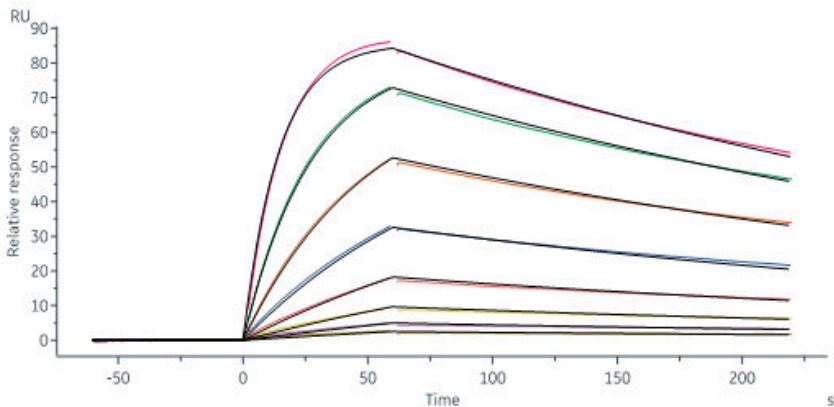
Human CLEC7A Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



The purity of Human CLEC7A Protein, His Tag (Cat. No. CL7-H5243AI) is more than 95% and the molecular weight of this protein is around 25-40 kDa verified by SEC-MALS.

Activity-SPR



Monoclonal anti-CD369 Antibody, Mouse IgG2a (15E2) captured on Protein A Chip can bind Human CLEC7A Protein, His Tag (Cat. No. CL7-H5243AI) with an affinity constant of 8.69 nM as determined in a SPR assay (Biacore 8K) (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).



www.acrobiosystems.com