Human CLEC5A / MDL-1 Protein, His Tag

Catalog # CLA-H5243AI

Application

Human CLEC5A 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

CLEC5A, CLECSF5, superfamilymember 5, C-type lectin domain family 5, member A, MDL1, MDL-1, DAP12-associating lectin 1

Source

Human CLEC5A Protein, His Tag (CLA-H5243AI) is expressed from human 293 cells (HEK293). It contains AA Pro 28 - Lys 188 (Accession # Q9NY25-1).

Predicted N-terminus: His

Molecular Characterization

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

The protein has a calculated MW of 39.0 kDa. The protein migrates as 50-70 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

Formulated in a proprietary trehalose-free buffer, supplied ready-to-use for SPR/BLI analysis - no buffer exchange required.

For detailed formulation, please refer to the batch-specific COA.

Shipping and Storage

This product is supplied and shipped on dry ice.

Please avoid repeated freeze-thaw cycles.

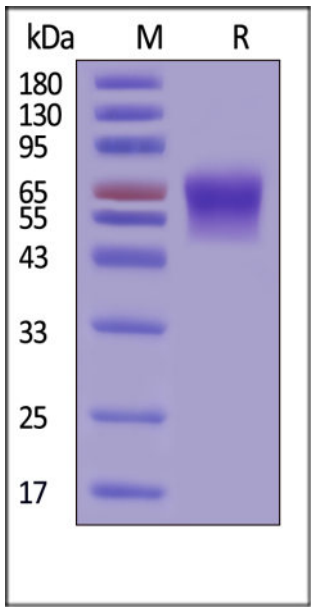
This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 12 months under sterile conditions.

ACRO Quality Management System

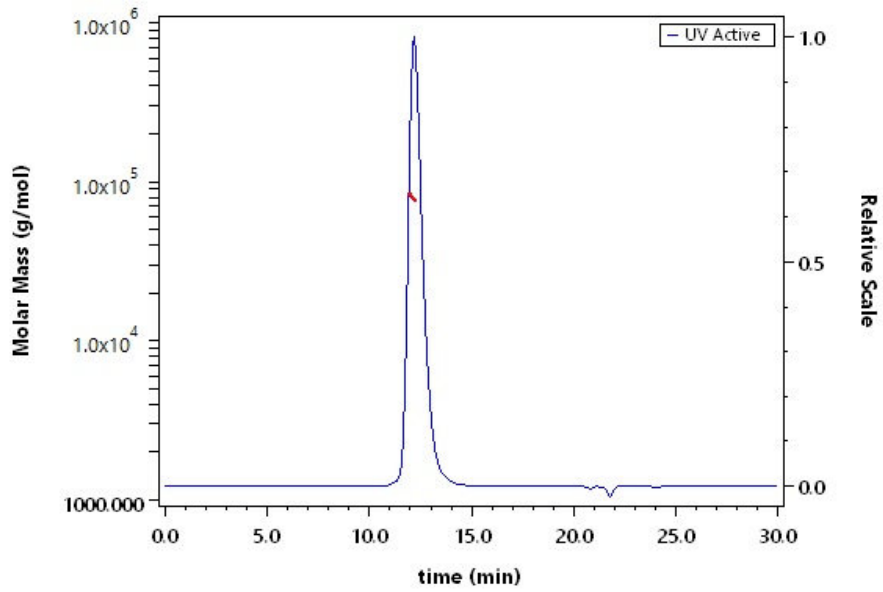
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE



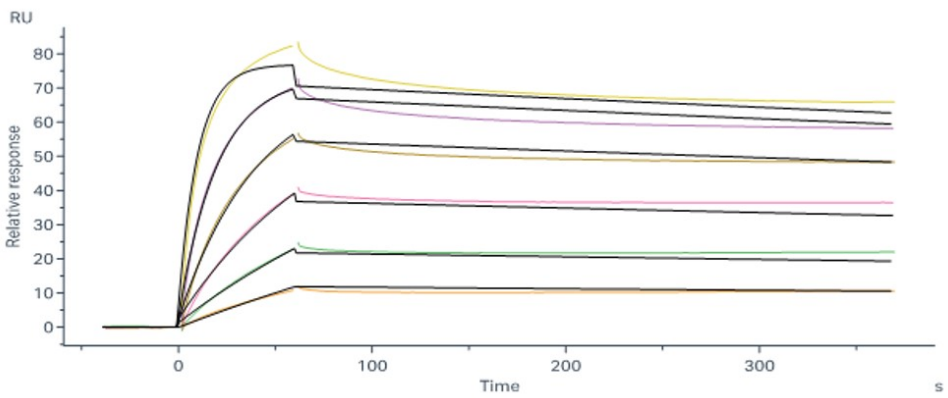
Human CLEC5A Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS



The purity of Human CLEC5A Protein, His Tag (Cat. No. CLA-H5243AI) is more than 95% and the molecular weight of this protein is around 70-90 kDa verified by SEC-MALS.

Activity-SPR



Recombinant Human Galectin-9 Protein, CF (E.Coli) immobilized on CM5 Chip can bind Human CLEC5A Protein, His Tag (Cat. No. CLA-H5243AI) with an affinity constant of 97.6 pM as determined in a SPR assay (Biacore 8K) (QC tested).

Background

CLEC5A, also known as MDL1 and MDL-1, is a member of the C-type lectin/C-type lectin-like domain (CTL/CTLD) superfamily.CLEC5A is expressed on monocytes, macrophages, and neutrophils. Its expression is up-regulated on monocytes in rheumatoid arthritis. CLEC5A with dnax-activation protein 12 and may play a role in cell activation. It also functions as a positive regulator of osteoclastogenesis. CLEC5A acts as a key regulator of synovial injury and bone erosion during autoimmune joint inflammation .The binding of dengue virus to CLEC5A triggers signaling through the phosphylation of TYROBP, this interaction does not result in viral entry, but stimulates proinflammatory cytokine release.

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