

Human CD44 Protein, Fc Tag (HPLC-verified)

Catalog # PG1-H5255



Synonyms

CD44, CDW44, CSPG8, ECMR-III, HCELL, HUTCH-I, IN, LHR, MC56, MDU2, MDU3, MIC4, Pgp1, Epican

Source

Human CD44 Protein, Fc Tag (PG1-H5255) is expressed from human 293 cells (HEK293). It contains AA Gln 21 - Pro 220 (Accession # [AAH04372](#)).

Predicted N-terminus: Gln 21

Molecular Characterization

CD44(Gln 21 - Pro 220) AAH04372	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 48.7 kDa. The protein migrates as 55-70 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-HPLC.

Formulation

Lyophilized from 0.22 µm filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5 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.

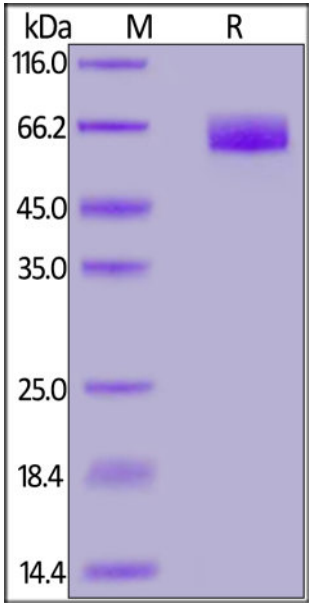
This product is stable after storage at:

- -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

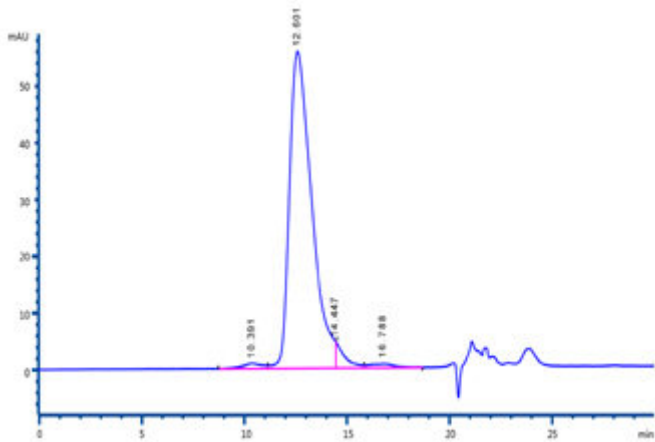
- [QMS\(ISO, GMP\)](#).
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



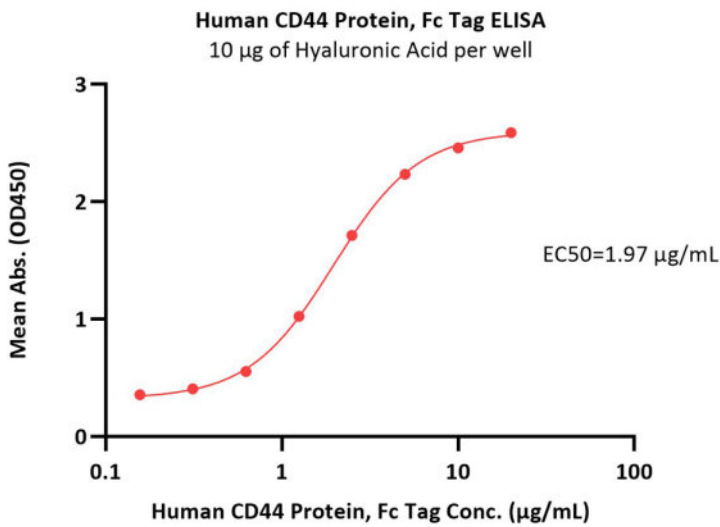
Human CD44 Protein, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

SEC-HPLC

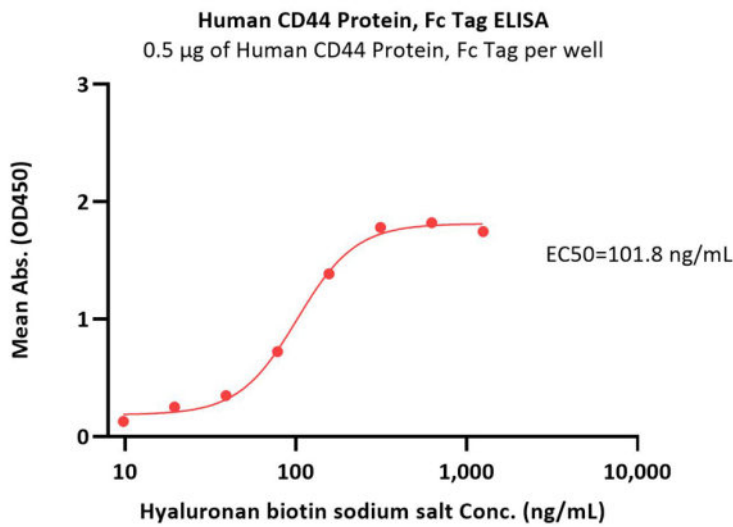


The purity of Human CD44 Protein, Fc Tag (Cat. No. PG1-H5255) was greater than 90% as determined by SEC-HPLC.

Bioactivity-ELISA

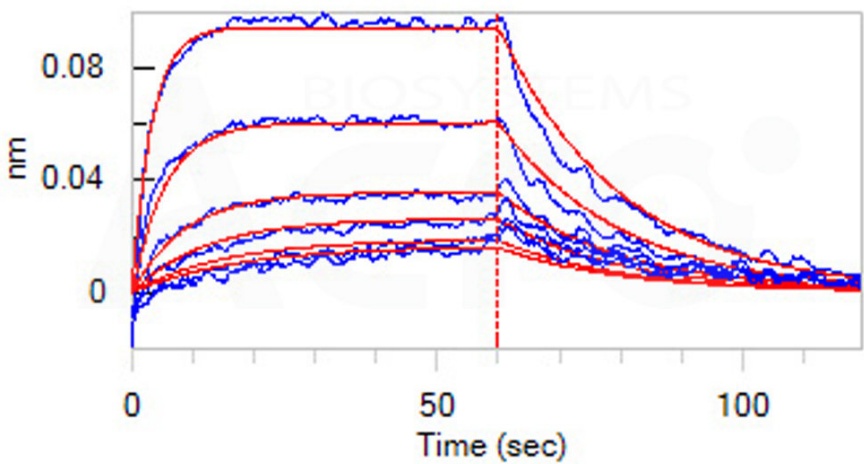


Immobilized Hyaluronic Acid at 100 µg/mL (100 µL/well) can bind Human CD44 Protein, Fc Tag (Cat. No. PG1-H5255) with a linear range of 0.156-2.5 µg/mL (Routinely tested).



Immobilized Human CD44 Protein, Fc Tag (Cat. No. PG1-H5255) at 5 µg/mL (100 µL/well) can bind Hyaluronan biotin sodium salt with a linear range of 10-156 ng/mL (Routinely tested).

Bioactivity-BLI



Loaded Biotinylated Human Siglec-15, Fc,Avitag (Cat. No. SG5-H82F5) on SA Biosensor, can bind Human CD44, Fc Tag (HPLC-verified) (Cat. No. PG1-H5255) with an affinity constant of 926 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

CD44 antigen is a cell-surface glycoprotein involved in cell–cell interactions, cell adhesion and migration. CD44 is expressed in a large number of mammalian cell types. CD44 is a receptor for hyaluronic acid and can also interact with other ligands, such as osteopontin, collagens, and matrix metalloproteinases (MMPs). CD44 function is controlled by its posttranslational modifications. One critical modification involves discrete sialofucosylations rendering the selectin-binding glycoform of

CD44 called HCELL (for Hematopoietic Cell E-selectin/L-selectin Ligand). CD44 participates in a wide variety of cellular functions including lymphocyte activation, recirculation and homing, hematopoiesis, and tumor metastasis. Transcripts for this gene undergo complex alternative splicing that results in many functionally distinct isoforms.



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