

For Research Use Only

Recombinant Rat CD44 protein (rFc Tag) (HPLC verified)



Catalog Number: Eg1458

Basic Information

Species:
Rat

Purity:
>90 %, SDS-PAGE
 >90 %, SEC-HPLC

Tag:
rFc Tag

Technical Specifications

Purity:
>90 %, SDS-PAGE
 >90 %, SEC-HPLC

Endotoxin Level:
<0.1 EU/μg protein, LAL method

Source:
HEK293-derived Rat CD44 protein Gln22-Glu271 (Accession# O70509) with a rabbit IgG Fc tag at the C-terminus.

GeneID:
25406

Accession:
O70509

Predicted Molecular Mass:
53.3 kDa

SDS-PAGE:
62-85 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 μm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:
It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20°C to -80°C as lyophilized proteins.
- 3 months, -20°C to -80°C under sterile conditions after reconstitution.

Shipping:
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

CD44 is a type I transmembrane glycoprotein that mediates cell-cell and cell-matrix interactions through its affinity for hyaluronic acid (HA) and possibly also through its affinity for other ligands. Adhesion with HA plays an important role in cell migration, tumor growth and progression (PMID: 29747682). CD44 is also involved in lymphocyte activation, recirculation and homing, and in hematopoiesis (PMID: 25941526). CD44 serves as an activation marker distinguishing memory and effector T cells from their naive counterparts. It also plays a role in early T cell signaling events, enhancing T cell receptor signaling (PMID: 26172046). This protein exists in multiple forms generated by alternative RNA splicing and extensive post-translational modifications.

References

1. Chen C. et al. (2018). J Hematol Oncol. 11(1):64.
2. Gutjahr JC. et al. (2015). Front Immunol. 6:177.
3. Schumann J. et al. (2015). PLoS One. 24;10(11):e0143986.

Synonyms

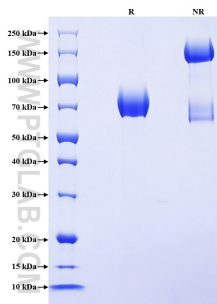
CD44 antigen, ECMR-III, Extracellular matrix receptor III, GP90 lymphocyte homing/adhesion receptor, Hermes antigen

For technical support and original validation data for this product please contact

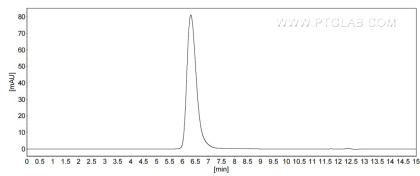
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Selected Validation Data



Purity of Recombinant Rat CD44 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.



The purity of Rat CD44 was greater than 90% as determined by SEC-HPLC.