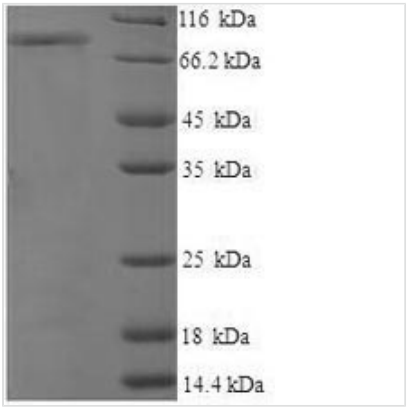
Recombinant Human CD44 antigen (CD44), partial

Product Code	CSB-EP004938HU
Relevance	Receptor for hyaluronic acid (HA). Mediates cell-cell and cell-matrix interactions through its affinity for HA, and possibly also through its affinity for other ligands such as osteopontin, collagens, and matrix metalloproteinases (MMPs). Adhesion with HA plays an important role in cell migration, tumor growth and progression. In cancer cells, may play an important role in invadopodia formation. Also involved in lymphocyte activation, recirculation and homing, and in hatopoiesis. Altered expression or dysfunction causes numerous pathogenic phenotypes. Great protein heterogeneity due to numerous alternative splicing and post-translational modification events.
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P16070
Alias	CDw44Epican;Extracellular domain matrix receptor III ;ECMR-IIIGP90 lymphocyte homing/adhesion receptor;HUTCH-IHeparan sulfate proteoglycan;Hermes antigen;Hyaluronate receptor;Phagocytic glycoprotein 1 ;PGP-1;Phagocytic glycoprotein I ;PGP-I; CD44
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	QIDLNITCRFAGVFHVEKNGRYSISRTEAADLCKAFNSTLPTMAQMEKALSIGF ETCRYGFIEGHVVIPRIHPNSICAANNTGVYILTSNTSQYDTYCFNASAPPEEDC TSVTDLPNAFDGPITITIVNRDGTRYVQKGEYRTNPEDIYPSNPTDDDVSSGSS SERSSTSGGYIFYTFSTVHPIPDEDSPWITDSTDRIPATSTSSNTISAGWEPNEE NEDERDRHLSFSGSGIDDDEDFISSTISTTPRAFDHTKQNQDWTQWNPSHSN PEVLLQTTTRMTDVDRNGTTAYEGNWNPEAHPPLIHHEHHEEEETPHSTSTIQ ATPSSTTEETATQKEQWFGNRWHEGYRQTPREDSHSTTGTAAASAHTSHPM QGRTTPSPEDSSWTDFFNPISHPMGRGHQAGRRMDMDSSHSTTLQPTANPN TGLVEDLDRTGPLSMTTQQSNSQSFSTSHEGLEEDKDHPTTSTLTSSNRNDV TGGRRDPNHSEGSTTLLEGYTSHYPHTKESRTFIPVTSAKTGSFGVTAVTVGD SNSNVNRSLSGDQDTFHPSGGSHTTHGSESDGHSHGSQEGGANTTSGPIRT PQIPE
Lead Time	3-7 business days
Source	E.coli
Gene Names	CD44
Expression Region	21-606aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	80.2kDa
Protein Description	Partial of BC004372

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

CUSABIO expressed the human CD44 amino acid residues Gln21-Glu606 carrying an N-terminal 6xHis-SUMO-tag in E.coli. The obtained product is the recombinant partial-length human CD44 protein. It underwent SDS-PAGE analysis and got a purity greater than 90%. The observed molecular mass was approximately 90 kDa, slightly higher than the calculated one (80.2 kDa). This recombinant CD44 protein may be applied to synthesize specific antibodies or in the studies of CD44-mediated signal transduction.

CD44 is a non-kinase transmembrane glycoprotein ubiquitously expressed throughout the body. CD44 binding to its main ligand, hyaluronic acid (HA), leads to activation of cell signaling pathways that induces cell proliferation, increases cell survival, modulates cytoskeletal changes, and enhances cellular motility. Overexpression of CD44 has been detected in cancer stem cells and is associated with cancer development, progression, migration, and invasion.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.