

Recombinant Rat CD44 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52326

Size: 10ug, 100ug

Protein Name: CD44 antigen (Extracellular matrix receptor III) (ECMR-III) (GP90 lymphocyte homing/adhesion receptor) (HUTCH-I) (Hermes antigen) (Hyaluronate receptor) (Phagocytic glycoprotein 1) (PGP-1) (Phagocytic glycoprotein I) (PGP-I) (CD antigen CD44)

Synonym: Cd44

UniProt ID: P26051

UniProt Link: www.uniprot.org/uniprotkb/P26051/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 503 AA

Molecular Weight: 56 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MDKVWWHTAWGLLCLLQLSLAQQQIDLNITCRYAGVFHVEKNGRYSISRTEAADLCEAFNTTLPTMA
QMELALRKGFETCRYGFIEGHVVIPRIHPNAICAANNTGVYILLASNTSHYDTYCFNASAPLEEDCTSV
TDLPSNFDGPVTITIVNRDGTTRYSKKGEYRTHQEDIDASNIIDEDVSSGSTIEKSTPEGYILHTDLPTSQ
PTGDRDDAFFIGSTLATIATTPWVSAHTKQNQERTQWNPIHSNPEVLLQTTTRMTDIDRNSTSAHGE
NWTQEPQPPFNNHEYQDEEETPHATSTTWADPNSTTEEAATQKEKWFENEWQGKNPPTPSEDSH
VTEGTTASAHNNHPSQRMTTQSQEDVSWTDFFDPISHPMGQGHQTESKGHSSGNQDSGVTTTSG
PARRPQIPEWLILASLLALALILAVNCIAVNSRRRCGQKKKLVINSGNGTVEDRKPSSELNGEASKSQEM
VHLVNKEPTETPDQFMTADETRNLQSVDKIGV

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.



4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant CD44 antigen (Extracellular matrix receptor III) (ECMR-III) (GP90 lymphocyte homing/adhesion receptor) (HUTCH-I) (Hermes antigen) (Hyaluronate receptor) (Phagocytic glycoprotein 1) (PGP-1) (Phagocytic glycoprotein I) (PGP-I) (CD antigen CD44) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Cell-surface receptor that plays a role in cell-cell interactions, cell adhesion and migration, helping them to sense and respond to changes in the tissue microenvironment. Participates thereby in a wide variety of cellular functions including the activation, recirculation and homing of T-lymphocytes, hematopoiesis, inflammation and response to bacterial infection. Engages, through its ectodomain, extracellular matrix components such as hyaluronan/HA, collagen, growth factors, cytokines or proteases and serves as a platform for signal transduction by assembling, via its cytoplasmic domain, protein complexes containing receptor kinases and membrane proteases. Such effectors include PKN2, the RhoGTPases RAC1 and RHOA, Rho-kinases and phospholipase C that coordinate signaling pathways promoting calcium mobilization and actin-mediated cytoskeleton reorganization essential for cell migration and adhesion. Upon interaction with LGALS9 ligand, activates downstream signaling components including LCK, ERK and MAPK to promotes NK cell activation.

Subcellular Localization: Cell membrane ; Single-pass type I membrane protein . Cell projection, microvillus . Secreted . Note=Colocalizes with actin in membrane protrusions at wounding edges. Co-localizes with RDX, EZR and MSN in microvilli.

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer- composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.