

## CD44 Protein, Human (Biotinylated, HEK293)

<b>Cat. No.:</b>	HY-P700402
<b>Synonyms:</b>	CD44 Antigen; CDw44; Epican; Extracellular Matrix Receptor III; ECMR-III; GP90 Lymphocyte Homing/Adhesion Receptor; HUTCH-I; Heparan Sulfate Proteoglycan; Hermes Antigen; Hyaluronate Receptor; Phagocytic Glycoprotein 1; PGP-1; Phagocytic Glycoprotein I; PGP-I; CD44; LHR
<b>Species:</b>	Human
<b>Source:</b>	HEK293
<b>Accession:</b>	P16070 (Q21-P220)
<b>Gene ID:</b>	960
<b>Molecular Weight:</b>	Approximately 29 kDa. The reducing (R) protein migrates as 75 kDa in SDS-PAGE maybe due to glycosylation.

### PROPERTIES

<b>AA Sequence</b>	<p>           Q I D L N I T C R F    A G V F H V E K N G    R Y S I S R T E A A    D L C K A F N S T L            P T M A Q M E K A L    S I G F E T C R Y G    F I E G H V V I P R    I H P N S I C A A N            N T G V Y I L T S N    T S Q Y D T Y C F N    A S A P P E E D C T    S V T D L P N A F D            G P I T I T I V N R    D G T R Y V Q K G E    Y R T N P E D I Y P    S N P T D D D V S S            G S S S E R S S T S    G G Y I F Y T F S T    V H P I P D E D S P    W I T D S T D R I P         </p>
<b>Biological Activity</b>	Measured by its binding ability in a functional ELISA. Immobilized Anti-CD44 Mouse Monoclonal Antibody at 2 µg/mL can bind Biotinylated human CD44, the EC <sub>50</sub> is ≤6 ng/mL.
<b>Appearance</b>	Lyophilized powder.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, 6% Trehalose, pH 7.4.
<b>Endotoxin Level</b>	<1 EU/µg, determined by LAL method.
<b>Reconstitution</b>	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH <sub>2</sub> O.
<b>Storage &amp; Stability</b>	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
<b>Shipping</b>	Room temperature in continental US; may vary elsewhere.

### DESCRIPTION

<b>Background</b>	CD44, a cell-surface receptor, plays a pivotal role in cell-cell interactions, adhesion, and migration, enabling cells to sense
-------------------	---

---

and respond to alterations in the tissue microenvironment. Its involvement extends to diverse cellular functions, including the activation, recirculation, and homing of T-lymphocytes, hematopoiesis, inflammation, and response to bacterial infection. CD44 engages various extracellular matrix components, such as hyaluronan/HA, collagen, growth factors, cytokines, or proteases through its ectodomain, serving as a platform for signal transduction. This involves the assembly of protein complexes via its cytoplasmic domain, containing receptor kinases and membrane proteases. Effectors like PKN2, RAC1, RHOA, Rho-kinases, and phospholipase C coordinate signaling pathways with CD44, leading to calcium mobilization and actin-mediated cytoskeleton reorganization, crucial for cell migration and adhesion. CD44 interacts with a spectrum of molecules, including PKN2, TIAM1, TIAM2, hyaluronan, collagen, laminin, fibronectin, UNC119, PDPN, RDX, EZR, MSN, EGFR, and CD74, forming a complex network essential for its diverse cellular functions.

---

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA