

#### **CD44**

Mouse Monoclonal Antibody (Mab) Catalog # APA009

### **Specification**

# **CD44 - Product Information**

Application Primary Accession Host Clonality Calculated MW IHC <u>P16070</u> Mouse Monoclonal 81538 Da

## **CD44 - Additional Information**

Gene ID 960 Gene Name CD44 Other Names 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, CD44, LHR, MDU2, MDU3, MIC4

Dilution IHC~~1:100~500

StorageMaintain refrigerated at 2-8°C for up to 2<br/>weeks. For long term storage store at<br/>-20°C in small aliquots to prevent<br/>freeze-thaw cycles.PrecautionsCD44 is for research use only and not for<br/>use in diagnostic or therapeutic<br/>procedures.

### **CD44 - Protein Information**

Name CD44

Synonyms Function

LHR, MDU2, MDU3, MIC4 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 (PubMed:<u>16541107</u>, PubMed:<u>19703720</u>, PubMed:<u>22726066</u>). 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 (PubMed:<u>7528188</u>).



	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 (PubMed: <u>18757307</u> , PubMed: <u>23589287</u> ). 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 (PubMed: <u>15123640</u> )
Cellular Location	Cell membrane; Single-pass type I membrane protein. Cell projection, microvillus {ECO:0000250 UniProtKB:P15379}. Note=Colocalizes with actin in membrane protrusions at wounding edges. Co-localizes with RDX, EZR and MSN in microvilli. Localizes to cholesterol-rich membrane-bound lipid raft domains.
Tissue Location	{ECO:0000250 UniProtKB:P15379, ECO:0000269 PubMed:23589287} Isoform 10 (epithelial isoform) is expressed by cells of epithelium and highly expressed by carcinomas. Expression is repressed in neuroblastoma cells

## CD44 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- CD44 Images