

Anti-CD44v4 Antibody

Mouse Monoclonal Antibody Catalog # AH13634

## Specification

# Anti-CD44v4 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW IHC-P, IF, FC <u>P16070</u> <u>502328</u> Human Mouse Monoclonal Mouse / IgG2a, kappa 81538

### Anti-CD44v4 Antibody - Additional Information

Gene ID 960

#### **Other Names**

LHR; BA-1; chondroitin sulfate proteoglycan 8 (CSPG8); Epican; Extracellular Matrix Receptor III (ECM III); GP90 Lymphocyte Homing Adhesion Receptor; HCAM; HCELL; hematopoietic cell E- and L-selectin ligand; Heparan Sulfate Proteoglycan; Hermes Antigen; HAS; HUTCH I; Hyaluronate Receptor; Indian blood group; Inlu Related p80 Glycoprotein; Ly 24; MDU2; MDU3; MIC4; MUTCH I; Phagocytic Glycoprotein 1 (PGP-1)

#### **Application Note**

<span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class ="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_FC">FC~~1:10~50</span>

Format

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage

Store at 2 to 8°C.Antibody is stable for 24 months.

#### Precautions

Anti-CD44v4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# Anti-CD44v4 Antibody - Protein Information

Name CD44

Synonyms LHR, MDU2, MDU3, MIC4

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 (PubMed:<a href="http://www.uniprot.org/citations/16541107" target="\_blank">16541107</a>, PubMed:<a href="http://www.uniprot.org/citations/19703720" target="\_blank">19703720</a>, PubMed:<a href="http://www.uniprot.org/citations/22726066" target="\_blank">22726066</a>). 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:<a href="http://www.uniprot.org/citations/7528188" target=" blank">7528188</a>). 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:<a href="http://www.uniprot.org/citations/18757307" target=" blank">18757307</a>, PubMed:<a href="http://www.uniprot.org/citations/23589287" target=" blank">23589287</a>). 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:<a href="http://www.uniprot.org/citations/15123640" target=" blank">15123640</a>).

#### **Cellular Location**

Cell membrane; Single-pass type I membrane protein. Cell projection, microvillus {ECO:0000250|UniProtKB:P15379}. Secreted 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 {ECO:0000250|UniProtKB:P15379, ECO:0000269|PubMed:23589287}

#### **Tissue Location**

Detected in fibroblasts and urine (at protein level) (PubMed:25326458, PubMed:36213313, PubMed:37453717). Detected in placenta (at protein level) (PubMed:32337544). Isoform 10 (epithelial isoform) is expressed by cells of epithelium and highly expressed by carcinomas. Expression is repressed in neuroblastoma cells

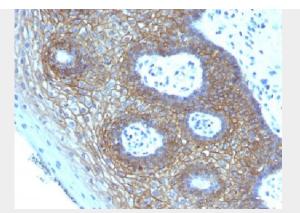
### Anti-CD44v4 Antibody - Protocols

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

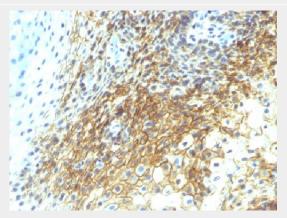
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### Anti-CD44v4 Antibody - Images





Formalin-paraffin human Cervical Squamous Cell Carcinoma stained with CD44v4 Monoclonal Antibody (CD44v4/1219)



Formalin-paraffin human Tongue Squamous Cell Carcinoma stained with CD44v4 Monoclonal Antibody (CD44v4/1219)

# Anti-CD44v4 Antibody - Background

This antibody recognizes an epitope encoded by exon v4 on the variant portion of human CD44. The CD44 molecule belongs to a family of cellular adhesion molecules found on a wide range of normal and malignant cells in epithelial, mesothelial and hemopoiesis tissues. CD44 is a single gene with 20 exons, of which 10 are normally expressed to encode the basic CD44 (H-CAM) molecule. The additional 10 exons (v1 to v10) are only expressed by alternative splicing of the nuclear RNA. The expression of specific cell adhesion molecule CD44 splice variants has been reported to be associated with metastasis in certain human malignancies.