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Anti-CD44v4 Antibody

Mouse Monoclonal Antibody
Catalog # AH13634

Product Information

Application	IHC-P, IF, FC
Primary Accession	P16070
Other Accession	502328
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG2a, kappa
Clone Names	CD44v4/1219
Calculated MW	81538

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	Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (0.5-1ug/ml); ,Immunohistology (Formalin-fixed) (0.5-1ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.
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.

Protein Information

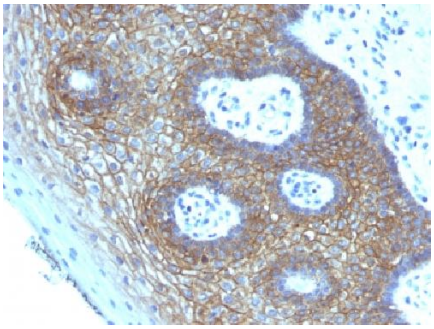
Name	CD44
Synonyms	LHR, MDU2, MDU3, MIC4

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:16541107, PubMed:19703720, PubMed:22726066). 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:7528188). 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:18757307, PubMed:23589287). 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:15123640). Upon interaction with LGALS9 ligand, activates downstream signaling components including LCK, ERK and MAPK to promotes NK cell activation (PubMed:37006235).
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

Background

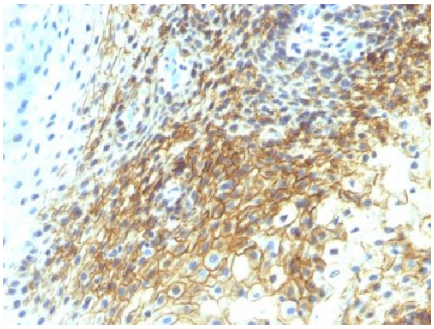
This antibody recognizes an epitope encoded by exon v4 on the variant portion of human CD44. The CD44 molecule belongs to a family of cellular adhesion molecules found on a wide range of normal and malignant cells in epithelial, mesothelial and hemopoiesis tissues. CD44 is a single gene with 20 exons, 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.

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)



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.