10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CD44 / HCAM Std. Antibody - With BSA and Azide
Mouse Monoclonal Antibody [Clone SPM544]
Catalog # AH10879

Specification

CD44 / HCAM Std. Antibody - With BSA and Azide - Product Information

Application	**,1,14,3,4,**
Primary Accession	P16070
Other Accession	960, 502328
Reactivity	**Human, Baboon, African Green Monkey**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse / IgG2a, kappa**
Calculated MW	**80-95kDa KDa**

CD44 / HCAM Std. Antibody - With BSA and Azide - Additional Information

Gene ID 960

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

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
CD44 / HCAM Std. Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

CD44 / HCAM Std. Antibody - With BSA and Azide - 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).

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}

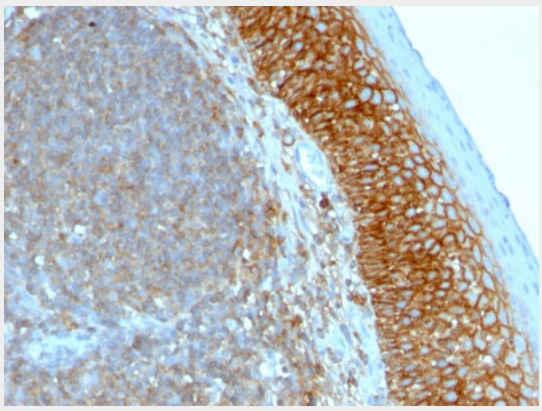
Tissue Location
Detected in fibroblasts and urine (at protein level) (PubMed:25326458, PubMed:36213313, PubMed:37453717). Detected in placenta (at protein level) (PubMed:32337544). Isoform 10 (epithelial isoform) is expressed by cells of epithelium and highly expressed by carcinomas. Expression is repressed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

CD44 / HCAM Std. Antibody - With BSA and Azide - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CD44 / HCAM Std. Antibody - With BSA and Azide - Images



10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Formalin-fixed, paraffin-embedded human Tonsil stained with CD44 Monoclonal Antibody (SPM544)

CD44 / HCAM Std. Antibody - With BSA and Azide - Background

Recognizes a cell surface glycoprotein of 80-95kDa (CD44) on lymphocytes, monocytes, and granulocytes. Its epitope is resistant to digestion by trypsin and chymotrypsin. The CD44 family of glycoproteins exists in a number of variant isoforms, the most common being the standard 85-95kDa or hematopoietic variant (CD44s). Higher molecular weight isoforms are described in epithelial cells (CD44v), which are believed to function in intercellular adhesion and stromal binding. CD44 immunostaining is commonly used for the discrimination of urothelial transitional cell carcinoma in-situ from non-neoplastic changes in the urothelium.

CD44 / HCAM Std. Antibody - With BSA and Azide - References

Schlossman SF, et. al. Leucocyte Typing V, p1713-1719, Oxford Univ. Press, 1995