

## **Product datasheet for UM570098**

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## **CD44 Mouse Monoclonal Antibody [Clone ID: UMAB133]**

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: UMAB133
Applications: IF, IHC, WB

Recommended Dilution: WB 1:4000, IHC 1:100

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human CD44(NP\_000601) produced in HEK293T

cell.

**Formulation:** PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

**Concentration:** 0.5~1.0 mg/ml (Lot Dependent)

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

Storage: Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

Gene Name: CD44 molecule (Indian blood group)

Database Link: NP 000601

Entrez Gene 960 Human

P16070





Background:

The protein encoded by this gene is a cell-surface glycoprotein involved in cell-cell interactions, cell adhesion and migration. It is a receptor for hyaluronic acid (HA) and can also interact with other ligands, such as osteopontin, collagens, and matrix metalloproteinases (MMPs). This protein participates in a wide variety of cellular functions including lymphocyte activation, recirculation and homing, hematopoiesis, and tumor metastasis. Transcripts for this gene undergo complex alternative splicing that results in many functionally distinct isoforms, however, the full length nature of some of these variants has not been determined. Alternative splicing is the basis for the structural and functional diversity of this protein, and may be related to tumor metastasis. [provided by RefSeq, Jul 2008]

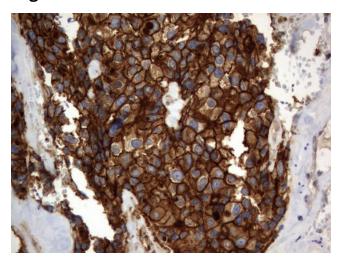
Synonyms: CDW44; CSPG8; ECMR-III; HCELL; HUTCH-I; IN; LHR; MC56; MDU2; MDU3; MIC4; Pgp1

**Protein Families:** Adult stem cells, Cancer stem cells, Druggable Genome, Embryonic stem cells, ES Cell

Differentiation/IPS, Stem cell relevant signaling - DSL/Notch pathway, Transmembrane

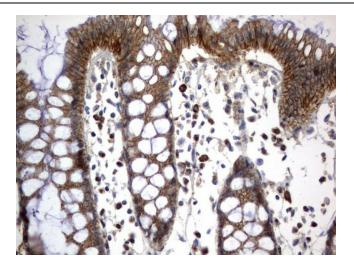
**Protein Pathways:** ECM-receptor interaction, Hematopoietic cell lineage

## **Product images:**

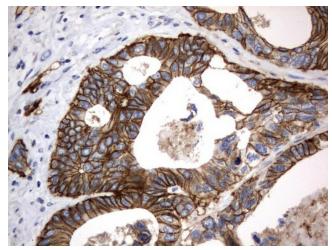


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human breast tissue using anti-CD44 mouse monoclonal antibody. ([UM500098]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min) (1:100).

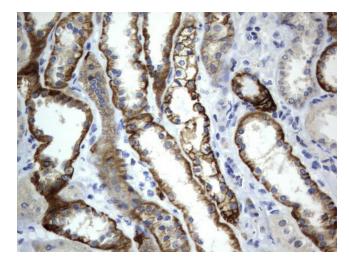




Immunohistochemical staining of paraffinembedded Human colon tissue using anti-CD44 mouse monoclonal antibody. ([UM500098]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min) (1:100).

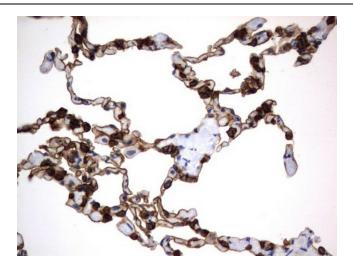


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human colon tissue using anti-CD44 mouse monoclonal antibody. ([UM500098]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min) (1:100).

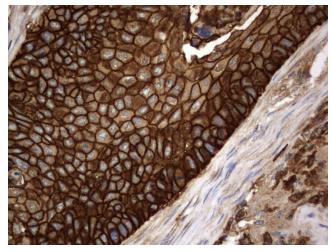


Immunohistochemical staining of paraffinembedded Human Kidney tissue using anti-CD44 mouse monoclonal antibody. ([UM500098]; heatinduced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min) (1:100).

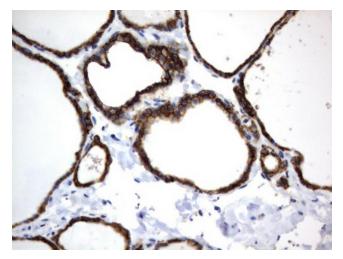




Immunohistochemical staining of paraffinembedded Human lung tissue using anti-CD44 mouse monoclonal antibody. ([UM500098]; heatinduced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min) (1:100).

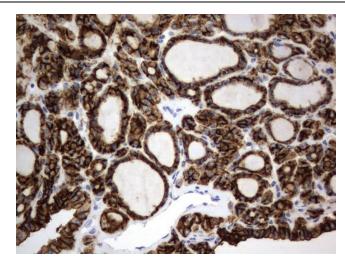


Immunohistochemical staining of paraffinembedded Carcinoma of Human lung tissue using anti-CD44mouse monoclonal antibody. ([UM500098]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min) (1:100).

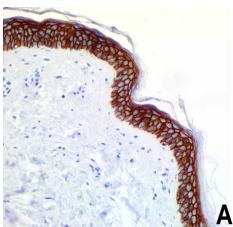


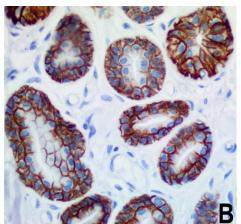
Immunohistochemical staining of paraffinembedded Human thyroid tissue using anti-CD44 mouse monoclonal antibody. ([UM500098]; heatinduced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min) (1:100).



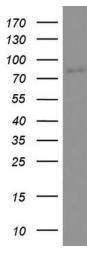


Immunohistochemical staining of paraffinembedded Carcinoma of Human thyroid tissue using anti-CD44 mouse monoclonal antibody. ([UM500098]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min) (1:100).



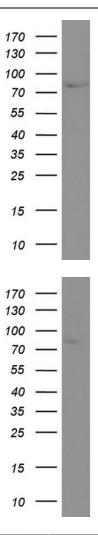


Immunohistochemical staining of paraffinembedded of human skin using anti-CD44 clone UMAB133 mouse monoclonal antibody at 1:200 dilution and detection with Polink2 Broad HRP DAB. [UM500098] requires heat-induced epitope retrieval with citrate pH6.0 at 95-100C 20 minutes. The composit image of (A) skin dermis and (B)sweat gland labeled shows strong membranous and cytoplasmic staining in >95 % of tumor cells and image A and B shows <10% nuclear stain.



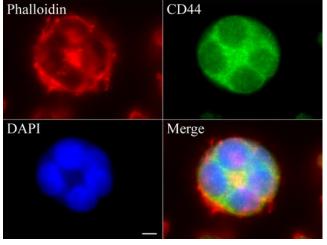
Western blot analysis of U251 cell lysate (35ug) by using anti-CD44 monoclonal antibody (1:4000).





Western blot analysis of SF295 cell lysate (35ug) by using anti-CD44 monoclonal antibody (1:4000).

Western blot analysis of MDA-MB231 cell lysate (35ug) by using anti-CD44 monoclonal antibody (1:4000).



Immunofluorescent staining of Jurkat cells using anti-CD44 mouse monoclonal antibody ([UM500098], green, 1:100). Actin filaments were labeled with Alexa Fluor® 594 Phalloidin (red), and nuclear with DAPI (blue). Scale bar, 4µm.