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# Product datasheet for UM500098CF

## 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:** | Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose) |
| **Reconstitution Method:** | For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific) |
| **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<br>Entrez Gene 960 Human<br>P16070 |

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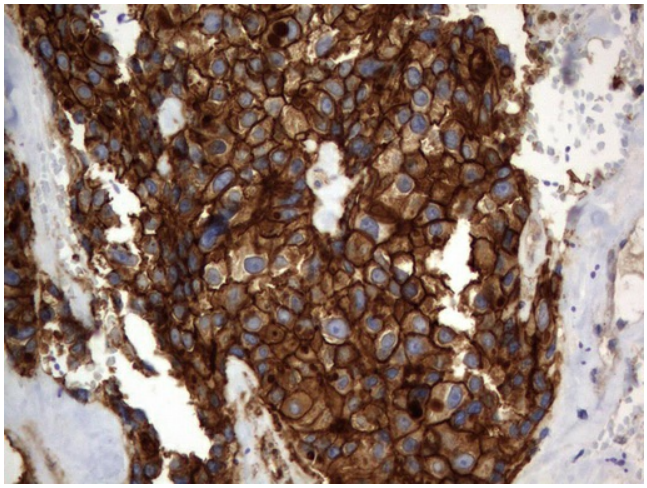
**Background:** The protein encoded by this gene is a cell-surface glycoprotein involved in cell-cell interactions, cell adhesion and migration. It is a receptor for hyaluronic acid (HA) and can also interact with other ligands, such as osteopontin, collagens, and matrix metalloproteinases (MMPs). This 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

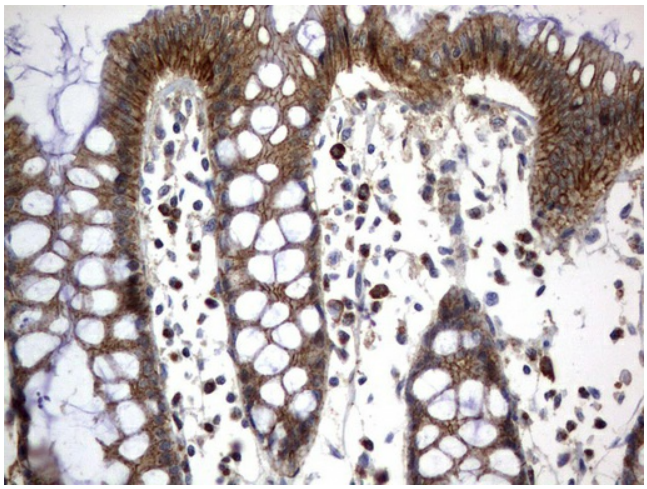
**Protein Families:** Adult stem cells, Cancer stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, Stem cell relevant signaling - DSL/Notch pathway, Transmembrane

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

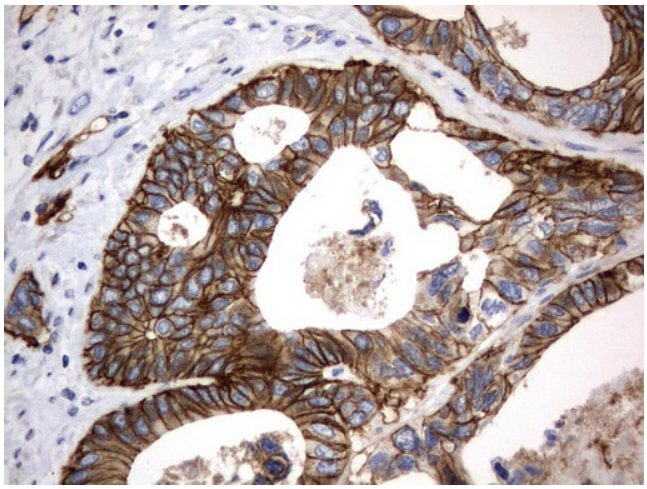
## Product images:



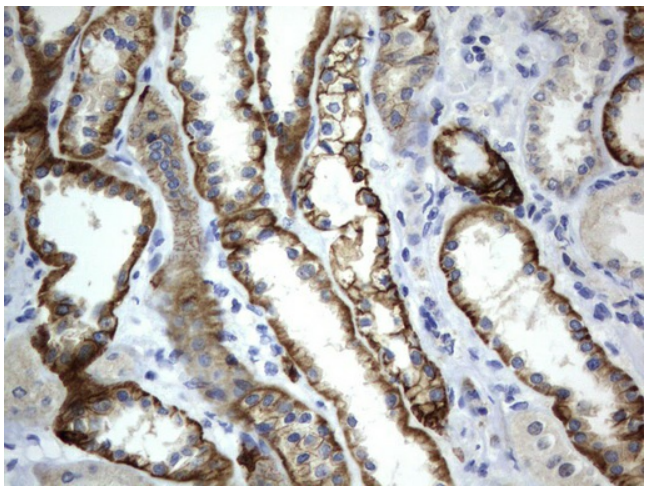
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human breast tissue using anti-CD44 mouse monoclonal antibody. ([UM500098]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min) (1:100).



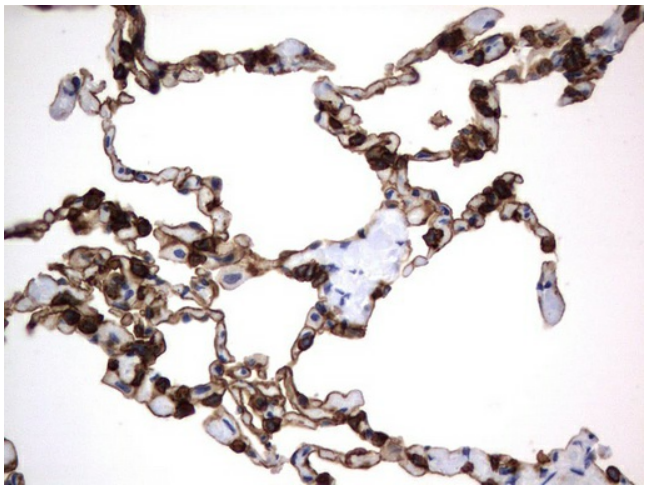
Immunohistochemical staining of paraffin-embedded Human colon tissue using anti-CD44 mouse monoclonal antibody. ([UM500098]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min) (1:100).



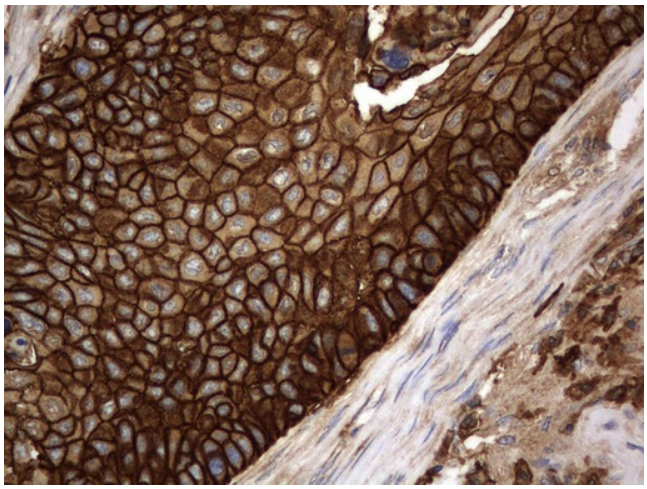
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human colon tissue using anti-CD44 mouse monoclonal antibody. ([UM500098]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min) (1:100).



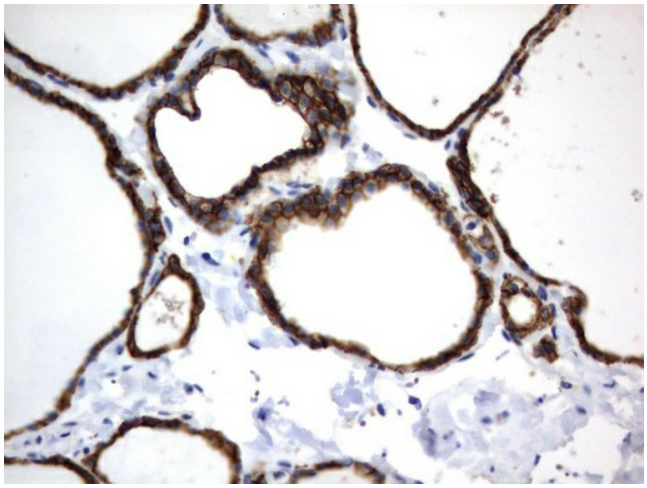
Immunohistochemical staining of paraffin-embedded Human Kidney tissue using anti-CD44 mouse monoclonal antibody. ([UM500098]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min) (1:100).



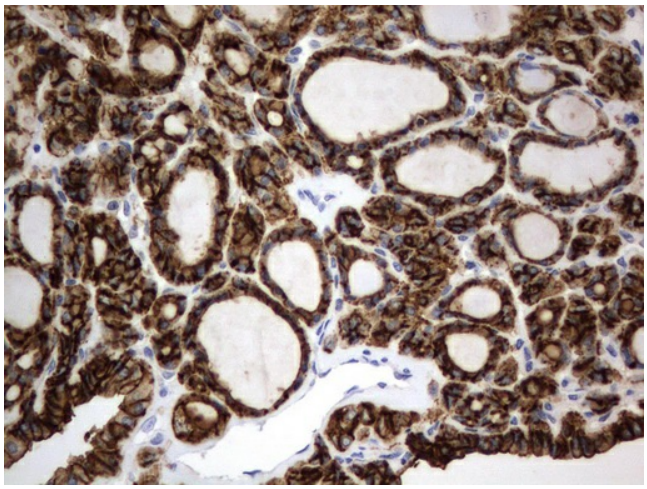
Immunohistochemical staining of paraffin-embedded Human lung tissue using anti-CD44 mouse monoclonal antibody. ([UM500098]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min) (1:100).



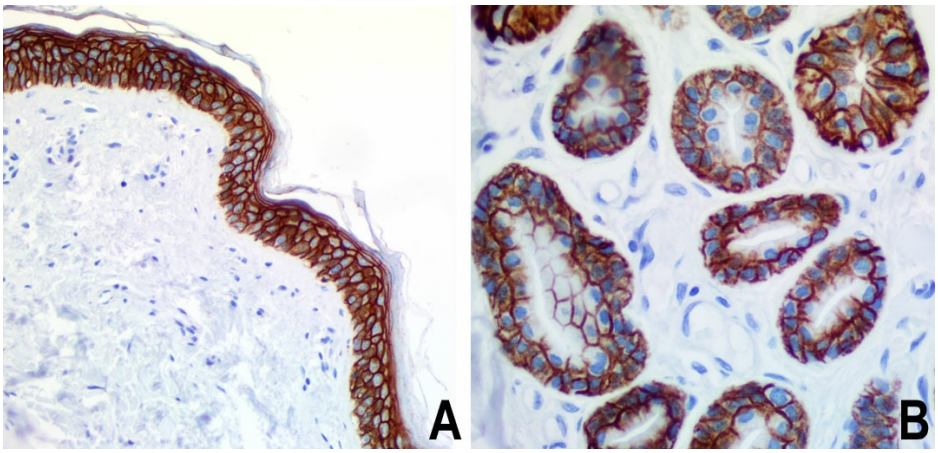
Immunohistochemical staining of paraffin-embedded Carcinoma of Human lung tissue using anti-CD44mouse monoclonal antibody. ([UM500098]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min) (1:100).



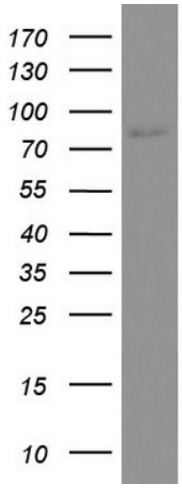
Immunohistochemical staining of paraffin-embedded Human thyroid tissue using anti-CD44 mouse monoclonal antibody. ([UM500098]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min) (1:100).



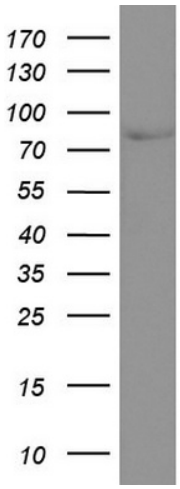
Immunohistochemical staining of paraffin-embedded Carcinoma of Human thyroid tissue using anti-CD44 mouse monoclonal antibody. ([UM500098]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min) (1:100).



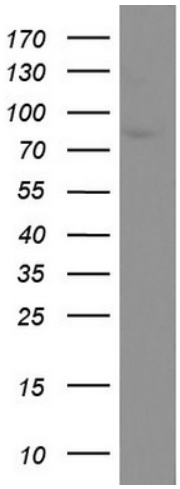

Immunohistochemical staining of paraffin-embedded of human skin using anti-CD44 clone UMAB133 mouse monoclonal antibody at 1:200 dilution and detection with Polink2 Broad HRP DAB. [UM500098] requires heat-induced epitope retrieval with citrate pH6.0 at 95-100C 20 minutes. The composit image of (A) skin 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.



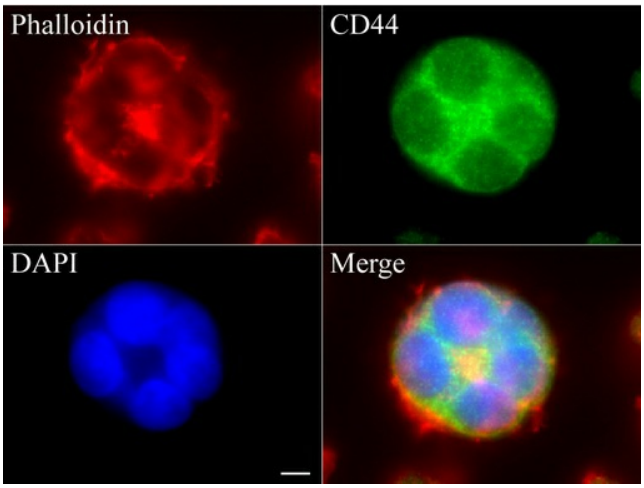

Western blot analysis of U251 cell lysate (35ug) by using anti-CD44 monoclonal antibody (1:4000).




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.