

## Product datasheet for **UM800008CF**

### EMA (MUC1) Mouse Monoclonal Antibody [Clone ID: UMAB57]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	UMAB57
Applications:	10k-ChIP, IF, IHC, WB
Recommended Dilution:	IHC 1:100
Reactivity:	Human
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human MUC1 (NP_001018016) 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.
Predicted Protein Size:	25.1 kDa
Gene Name:	mucin 1, cell surface associated
Database Link:	<a href="#">NP_001018016</a> <a href="#">Entrez Gene 4582 Human</a> <a href="#">P15941</a>



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**Background:**

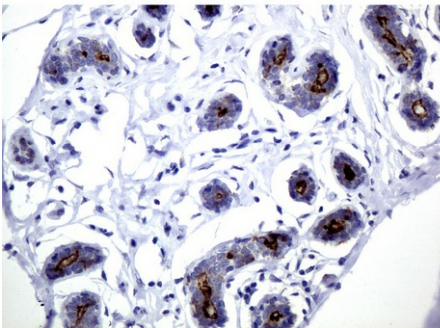
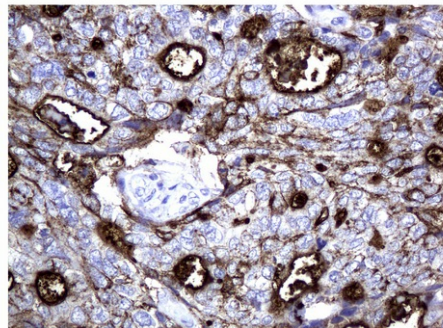
This gene encodes a membrane-bound protein that is a member of the mucin family. Mucins are O-glycosylated proteins that play an essential role in forming protective mucous barriers on epithelial surfaces. These proteins also play a role in intracellular signaling. This protein is expressed on the apical surface of epithelial cells that line the mucosal surfaces of many different tissues including lung, breast stomach and pancreas. This protein is proteolytically cleaved into alpha and beta subunits that form a heterodimeric complex. The N-terminal alpha subunit functions in cell-adhesion and the C-terminal beta subunit is involved in cell signaling. Overexpression, aberrant intracellular localization, and changes in glycosylation of this protein have been associated with carcinomas. This gene is known to contain a highly polymorphic variable number tandem repeats (VNTR) domain. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Feb 2011]

**Synonyms:**

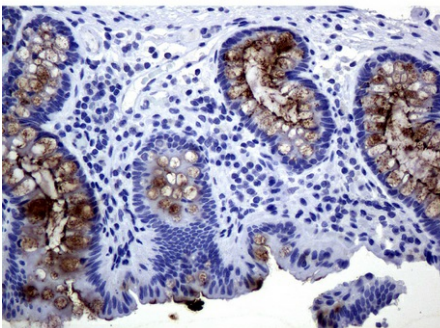
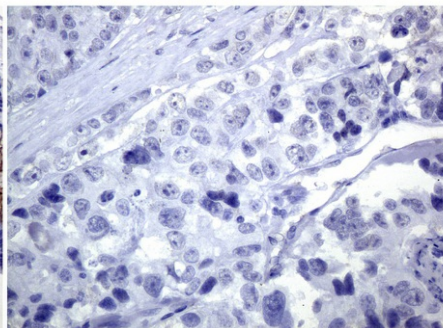
ADMCKD; ADMCKD1; CA 15-3; CD227; EMA; H23AG; KL-6; MAM6; MCD; MCKD; MCKD1; MUC-1; SEC

**Protein Families:**

Druggable Genome, Secreted Protein, Transmembrane

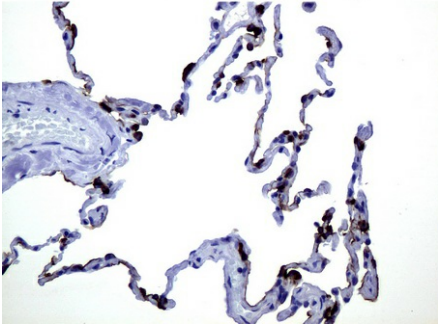
**Product images:**
**Normal Breast**

**Breast Adenocarcinoma**

**UM800008**

Immunohistochemical staining of paraffin-embedded Human normal breast tissue and breast adenocarcinoma tissue using anti-MUC1 mouse monoclonal antibody. ([UM800008]; heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.0, 120°C for 3min) (1:100)

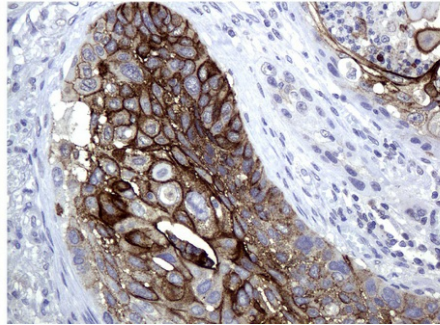
**Normal Colon**

**Colorectal Cancer**

**UM800008**

Immunohistochemical staining of paraffin-embedded Human normal colon tissue and colorectal cancer tissue using anti-MUC1 mouse monoclonal antibody. ([UM800008]; heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.0, 120°C for 3min) (1:100)

Normal Lung



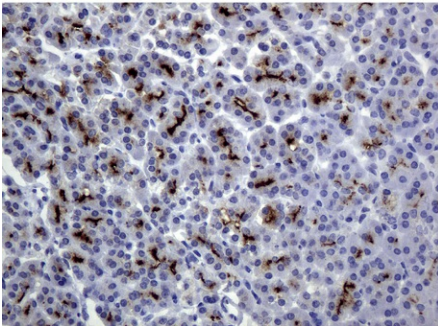
Lung Adenocarcinoma



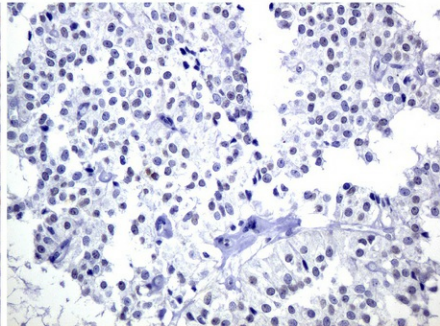
UM800008

Immunohistochemical staining of paraffin-embedded Human normal lung tissue and lung adenocarcinoma tissue using anti-MUC1 mouse monoclonal antibody. ([UM800008]; heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.0, 120°C for 3min) (1:100)

Normal Pancreas



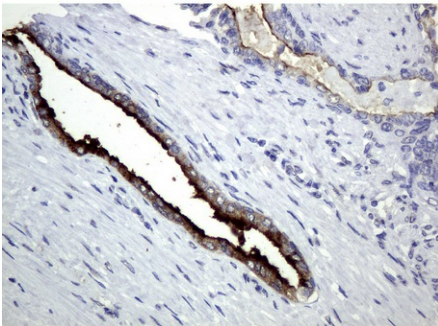
Pancreatic Cancer



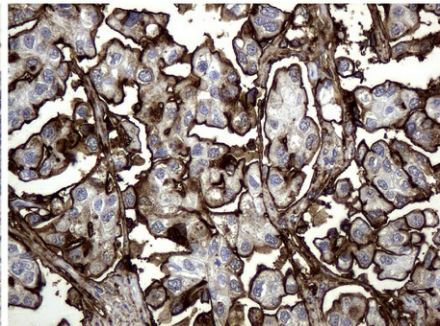
UM800008

Immunohistochemical staining of paraffin-embedded Human normal pancreas tissue and pancreatic cancer tissue using anti-MUC1 mouse monoclonal antibody. ([UM800008]; heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.0, 120°C for 3min) (1:100)

Normal Bladder

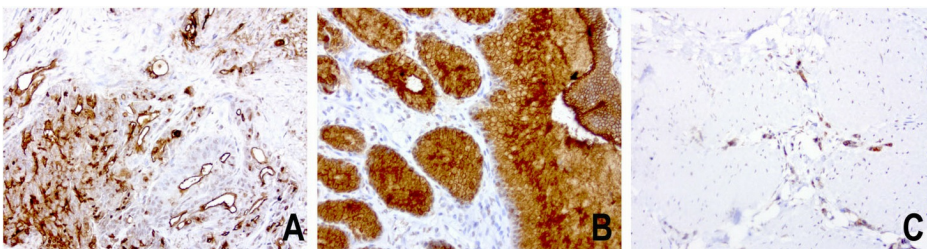


Bladder Cancer

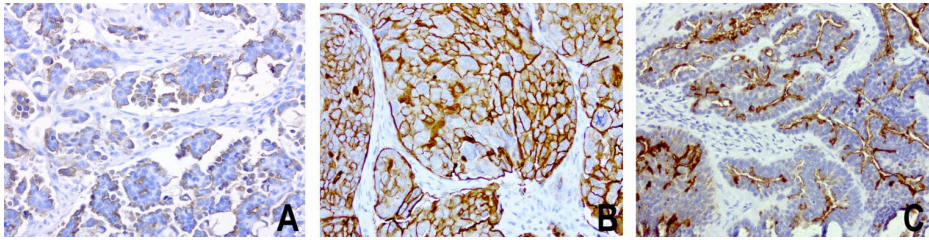


UM800008

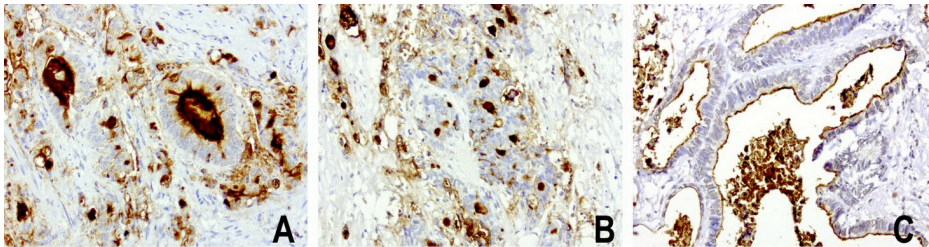
Immunohistochemical staining of paraffin-embedded Human normal bladder tissue and bladder cancer tissue using anti-MUC1 mouse monoclonal antibody. ([UM800008]; heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.0, 120°C for 3min) (1:100)



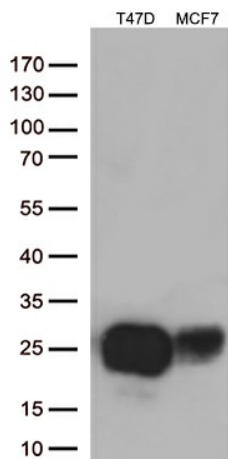
Immunohistochemical staining of paraffin-embedded human stomach carcinoma using anti-MUC1 (EMA) mouse monoclonal antibody at 1:200 dilution of 1mg/mL using Polink2 Broad HRP DAB for detection. [UM800008] requires heat-induced epitope retrieval with Accel pH8.7 at 110°C for 3min using pressure chamber/cooker. The image is a composite of 3 tumors which show strong membranous and cytoplasmic staining in >75 % tumor cells.



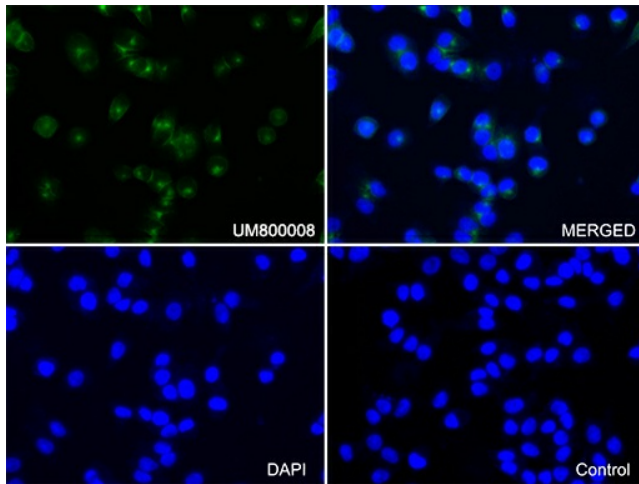
Immunohistochemical staining of paraffin-embedded human ovarian carcinoma using anti-MUC1 (EMA) mouse monoclonal antibody at 1:200 dilution of 1mg/mL using Polink2 Broad HRP DAB for detection. [UM800008] requires heat-induced epitope retrieval with Accel pH8.7 at 110°C for 3min using pressure chamber/cooker. The image is a composite of 3 tumors which show strong membranous and weak cytoplasmic staining in >75 % tumor cells.



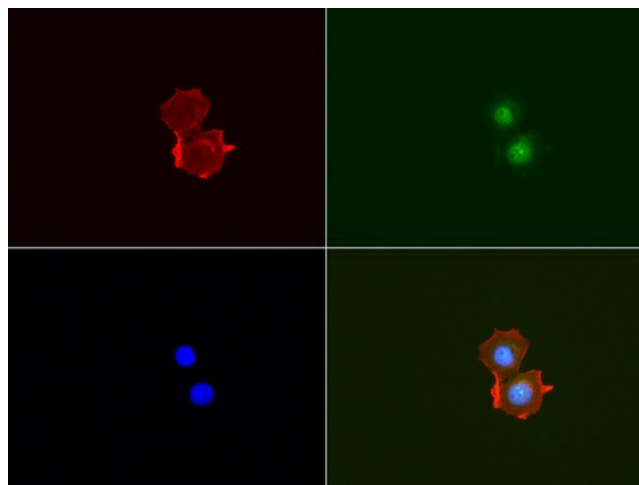
Immunohistochemical staining of paraffin-embedded human colon cancer using anti-MUC1 (EMA) mouse monoclonal antibody at 1:200 dilution of 1mg/mL using Polink2 Broad HRP DAB for detection. [UM800008] requires heat-induced epitope retrieval with Accel pH8.7 at 110°C for 3min using pressure chamber/cooker. The image is a composite of 3 tumors which show strong membranous and secreted protein however >75 % tumor cells are negative for cytoplasmic staining.



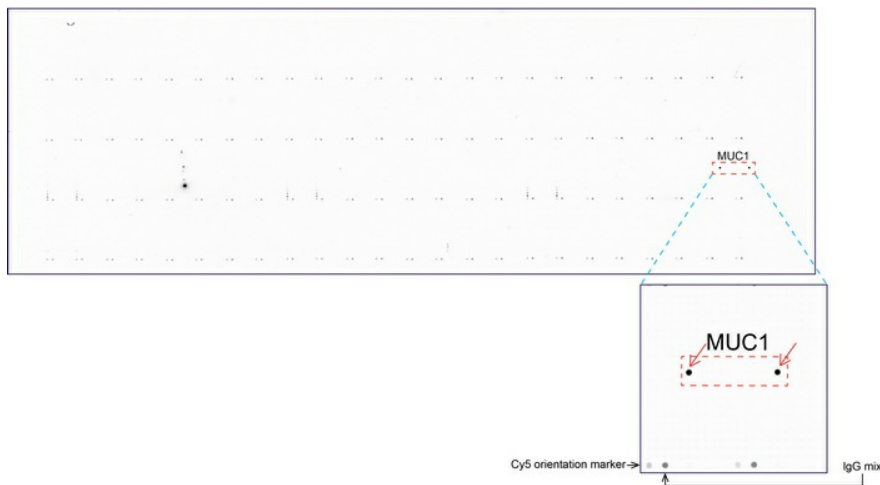
Western blot analysis of extracts (35ug) from 2 different cell lines by using anti-MUC1 monoclonal antibody (1:500).



Immunofluorescent staining of T47D cells using anti-MUC1 antibody ([UM800008]/green, upper left; DAPI/blue, lower left; MERGED, upper right) or Isotype control (MERGED, lower right) (1:100).



Immunofluorescent staining of MCF-7 cells using anti-MUC1/EMA mouse monoclonal antibody ([UM800008], green, 1:100). Actin filaments were labeled with Alexa Fluor® 594 Phalloidin (red), and nuclear with DAPI (blue).



OriGene overexpression protein microarray chip was immunostained with UltraMAB anti-MUC1 mouse monoclonal antibody (Clone UMAB37). The positive reactive proteins are highlighted with two red arrows in the enlarged subarray. All the positive controls spotted in this subarray are also labeled for clarification. These data show that UltraMAB anti-MUC1 (Clone UMAB57 ) very specifically recognizes MUC1 antigen on OriGene protein microarray chip (1:100).