

# Product datasheet for UM800076

### OriGene Technologies, Inc.

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## E Cadherin (CDH1) Mouse Monoclonal Antibody [Clone ID: UMAB184]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: UMAB184

**Applications:** 10k-ChIP, FC, IF, IHC, WB

Recommended Dilution: IHC 1:100~200

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: The extracellular domain of human CDH1 (NP\_004351) produced in human cells.

**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.

Predicted Protein Size: 94.8 kDa

Gene Name: cadherin 1

Database Link: NP 004351

Entrez Gene 999 Human

P12830



### E Cadherin (CDH1) Mouse Monoclonal Antibody [Clone ID: UMAB184] - UM800076

Background:

This gene is a classical cadherin from the cadherin superfamily. The encoded protein is a calcium dependent cell-cell adhesion glycoprotein comprised of five extracellular cadherin repeats, a transmembrane region and a highly conserved cytoplasmic tail. Mutations in this gene are correlated with gastric, breast, colorectal, thyroid and ovarian cancer. Loss of function is thought to contribute to progression in cancer by increasing proliferation, invasion, and/or metastasis. The ectodomain of this protein mediates bacterial adhesion to mammalian cells and the cytoplasmic domain is required for internalization. Identified transcript variants arise from mutation at consensus splice sites. [provided by RefSeq, Jul 2008]

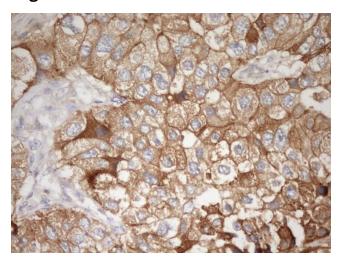
**Synonyms:** Arc-1; CD324; CDHE; ECAD; LCAM; UVO

**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, Transmembrane

Protein Pathways: Adherens junction, Bladder cancer, Cell adhesion molecules (CAMs), Endometrial cancer,

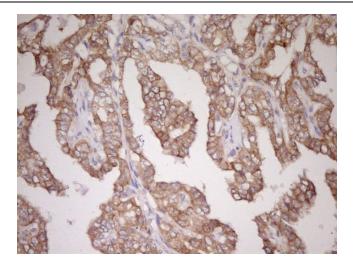
Melanoma, Pathogenic Escherichia coli infection, Pathways in cancer, Thyroid cancer

## **Product images:**

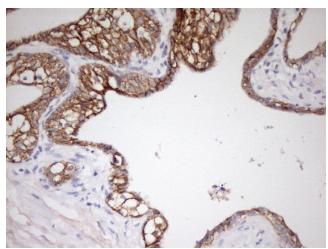


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human breast tissue using anti-CDH1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.0) at 120°C for 3min, UM800076) (1:200)

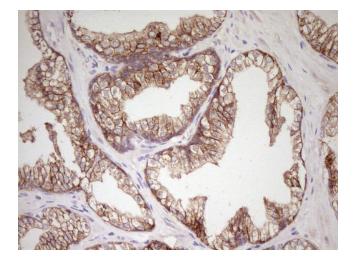




Immunohistochemical staining of paraffinembedded Carcinoma of Human thyroid tissue using anti-CDH1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.0) at 120°C for 3min, UM800076) (1:200)

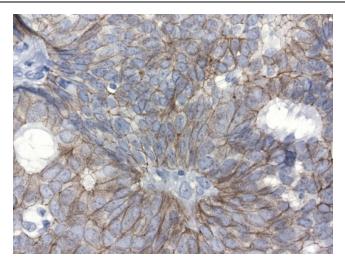


Immunohistochemical staining of paraffinembedded Human prostate tissue using anti-CDH1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.0) at 120°C for 3min, UM800076) (1:200)

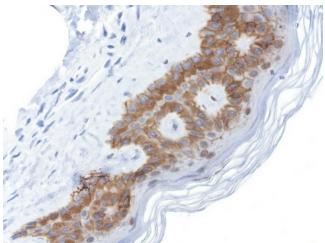


Immunohistochemical staining of paraffinembedded Carcinoma of Human prostate tissue using anti-CDH1 Mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.0) at 120°C for 3min, UM800076) (1:200)

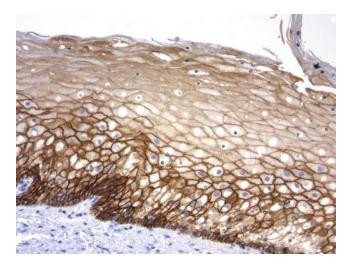




IHC staining of FFPE human breast cancer using anti-CDH1 clone UMAB184 mouse monoclonal antibody at 1:200 and detection with Polink2 Broad HRP DAB. UM800076 requires heatinduced epitope retrieval with Accel pH8.7. The image shows strong membranous and some weak cytoplasmic staining in the tumor cells.

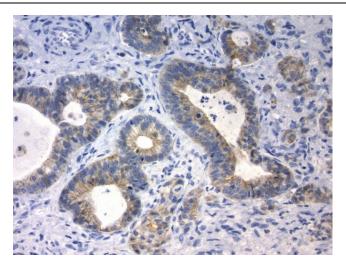


Immunohistochemical staining of paraffinembedded human skin using mouse anti-CDH1 clone UMAB184 (UM800076) at 1:200 with Polink2 Broad HRP DAB detection kit; pretreatment of tissue prior to stain with heatinduced epitope retrieval with GBI Accel pH 8.7 buffer using pressure chamber for 3 minutes at 110C is required for optimal staining. Shown here strong cytoplamic and membraneous staining on epithelial cells.



Immunohistochemical staining of paraffinembedded human normal cervix using mouse anti-CDH1 clone UMAB184 (UM800076) at 1:200 with Polink2 Broad HRP DAB detection kit; pretreatment of tissue prior to stain with heatinduced epitope retrieval with GBI Accel pH 8.7 buffer using pressure chamber for 3 minutes at 110C is required for optimal staining. Shown here strong cytoplamic and membraneous staining on squamous epithelial cells of the cervix.

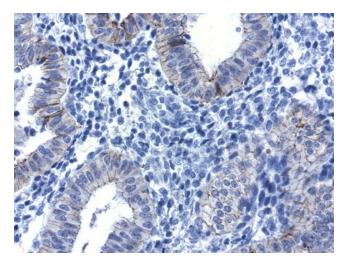




Immunohistochemical staining of paraffinembedded human colon cancer using mouse anti-CDH1 clone UMAB184 (UM800076) at 1:200 with Polink2 Broad HRP DAB detection kit; pretreatment of tissue prior to stain with heatinduced epitope retrieval with GBI Accel pH 8.7 buffer using pressure chamber for 3 minutes at 110C is required for optimal staining. Stain shows membraneous staining on tumor cells.

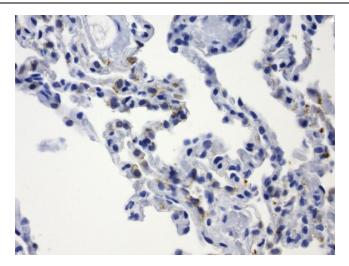


Immunohistochemical staining of paraffinembedded human endocervical gland using mouse anti-CDH1 clone UMAB184 (UM800076) at 1:200 with Polink2 Broad HRP DAB detection kit; pretreatment of tissue prior to stain with heatinduced epitope retrieval with GBI Accel pH 8.7 buffer using pressure chamber for 3 minutes at 110C is required for optimal staining. Stain shows membraneous staining on epithelial cells of the gland.

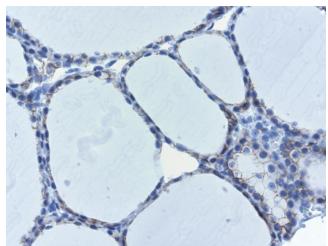


Immunohistochemical staining of paraffinembedded human endometrium using mouse anti-CDH1 clone UMAB184 (UM800076) at 1:200 with Polink2 Broad HRP DAB detection kit; pretreatment of tissue prior to stain with heatinduced epitope retrieval with GBI Accel pH 8.7 buffer using pressure chamber for 3 minutes at 110C is required for optimal staining. Stain shows membraneous staining on endometrium.

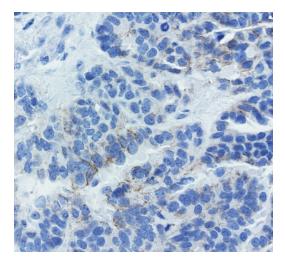




Immunohistochemical staining of paraffinembedded human lung using mouse anti-CDH1 clone UMAB184 (UM800076) at 1:200 with Polink2 Broad HRP DAB detection kit; pretreatment of tissue prior to stain with heatinduced epitope retrieval with GBI Accel pH 8.7 buffer using pressure chamber for 3 minutes at 110C is required for optimal staining. Stain shows membraneous staining.

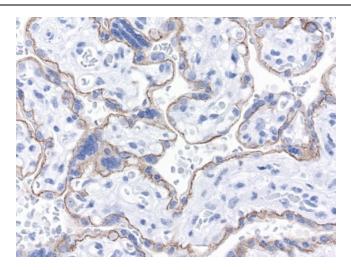


Immunohistochemical staining of paraffinembedded human thyroid using mouse anti-CDH1 clone UMAB184 (UM800076) at 1:200 with Polink2 Broad HRP DAB detection kit; pretreatment of tissue prior to stain with heatinduced epitope retrieval with GBI Accel pH 8.7 buffer using pressure chamber for 3 minutes at 110C is required for optimal staining. Shows membraneous staining.

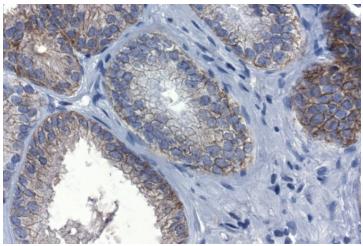


Immunohistochemical staining of paraffinembedded human ovarian cancer using mouse anti-CDH1 clone UMAB184 (UM800076) at 1:200 with Polink2 Broad HRP DAB detection kit; pretreatment of tissue prior to stain with heatinduced epitope retrieval with GBI Accel pH 8.7 buffer using pressure chamber for 3 minutes at 110C is required for optimal staining. Shows membraneous staining of the tumor cells.

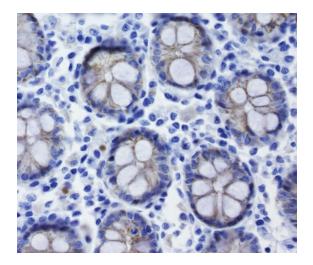




Immunohistochemical staining of paraffinembedded human placenta using mouse anti-CDH1 clone UMAB184 (UM800076) at 1:200 with Polink2 Broad HRP DAB detection kit; pretreatment of tissue prior to stain with heat-induced epitope retrieval with GBI Accel pH 8.7 buffer using pressure chamber for 3 minutes at 110C is required for optimal staining.

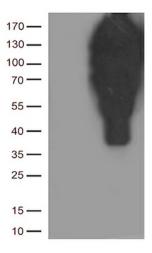


Immunohistochemical staining of paraffinembedded human prostate cancer using mouse anti-CDH1 clone UMAB184 (UM800076) at 1:200 with Polink2 Broad HRP DAB detection kit; pretreatment of tissue prior to stain with heatinduced epitope retrieval with GBI Accel pH 8.7 buffer using pressure chamber for 3 minutes at 110C is required for optimal staining. Shows membraneous staining of the tumor cells.

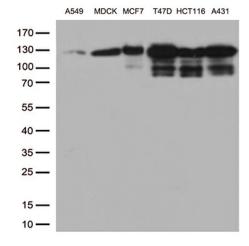


Immunohistochemical staining of paraffinembedded human small intestine using mouse anti-CDH1 clone UMAB184 (UM800076) at 1:200 with Polink2 Broad HRP DAB detection kit; pretreatment of tissue prior to stain with heatinduced epitope retrieval with GBI Accel pH 8.7 buffer using pressure chamber for 3 minutes at 110C is required for optimal staining. Shows mainly membranous staining and weak cytoplasmic staining.

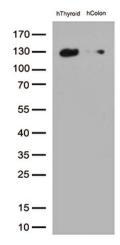




HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CDH1 ([RC220731], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CDH1 (1:500).



Western blot analysis of extracts (35ug) from 6 cell lines lysates by using anti-CDH1 monoclonal antibody (1:500).

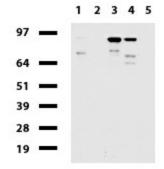


Western blot analysis of extracts (35ug) from 2 tissue lysates by using anti-CDH1 monoclonal antibody (1:500).

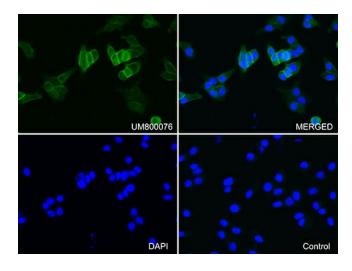




Western blot of cell lysates (35ug) from 9 different cell lines (1: HepG2, 2: HeLa, 3: SV-T2, 4: A549, 5: COS7, 6: Jurkat, 7: MDCK, 8: PC-12, 9: MCF7). Diluation: 1:500

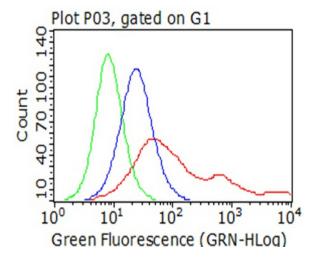


Western blot of human tissue lysates (15ug) from 5 different tissues (1: Liver, 2: Ovary, 3: Thyroid, 4: Colon, 5: Spleen ). Diluation: 1:500.

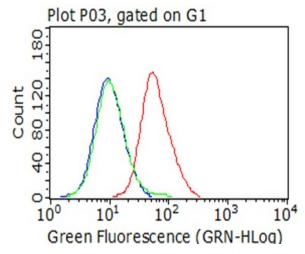


Immunofluorescent staining of T47D cells using anti-CDH1 antibody (UM800076/green, upper left; DAPI/blue, lower left; MERGED, upper right) or Isotype control (MERGED, lower right) (1:100).

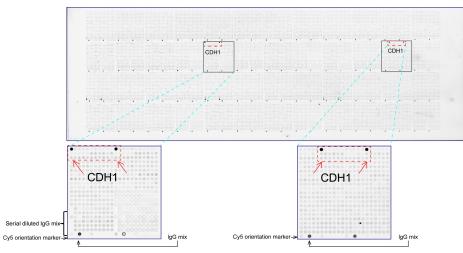




Flow cytometric analysis of living 293T cells transfected with CDH1 overexpression plasmid ([RC220731], Red)/empty vector ([PS100001], Blue) using anti-CDH1 antibody (UM800076). Cells incubated with a non-specific antibody (Green) were used as isotype control (1:100).



Flow cytometric analysis of living T47D cells, using anti-CDH1 antibody (UM800076, Red), compared to an isotype control (green), and a PBS control (blue) (1:100).



OriGene overexpression protein microarray chip was immunostained with UltraMAB anti-CDH1 mouse monoclonal antibody (UM800076). 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 (1:100).