

Product datasheet for UM500023

OriGene Technologies, Inc.

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N Cadherin (CDH2) Mouse Monoclonal Antibody [Clone ID: UMAB23]

Product data:

Product Type: Primary Antibodies

Clone Name: UMAB23

Applications: FC, IF, IHC, WB

Recommended Dilution: WB 1:2000, IHC 1:150, FLOW 1:100

Reactivity: Human, Mouse, Rat

Host: Mouse Isotype: IgG2a

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human CDH2(NP_001783) 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.

Predicted Protein Size: 97.2 kDa

Gene Name: cadherin 2

Database Link: NP 001783

Entrez Gene 12558 MouseEntrez Gene 83501 RatEntrez Gene 1000 Human

P19022

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. The protein functions during gastrulation and is required for establishment of left-right asymmetry. At certain central nervous system synapses, presynaptic to postsynaptic adhesion is mediated at

least in part by this gene product. [provided by RefSeq]



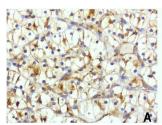


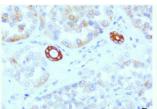
Synonyms: CD325; CDHN; CDw325; NCAD

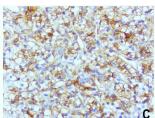
Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Transmembrane

Protein Pathways: Arrhythmogenic right ventricular cardiomyopathy (ARVC), Cell adhesion molecules (CAMs)

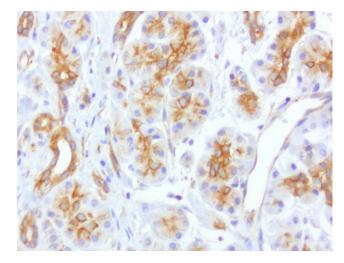
Product images:



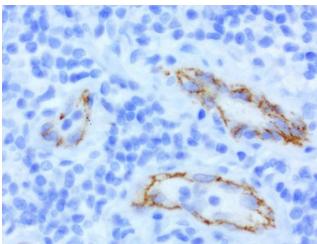




Immunohistochemical staining of paraffinembedded of 3 human carcinoma of kidney using anti-CDH2 clone UMAB23 mouse monoclonal antibody at 1:400 dilution of 1.0mg/mL using Polink2 Broad HRP DAB detection kit. UM500023 requires heat-induced epitope retrieval with Citrate pH6.0 in a pressure chamber/cooker high 3min. The composit image of 3 human carcinoma of the kidney all show strong membraneous and cytoplasmic staining in the tumor cells.

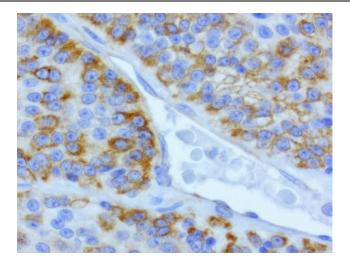


Immunohistochemical staining of paraffinembedded of human pancreas using anti-CDH2 clone UMAB23 mouse monoclonal antibody at 1:400 dilution of 1.0mg/mL using Polink2 Broad HRP DAB detection kit. UM500023 requires heat-induced epitope retrieval with Citrate pH6.0 in a pressure chamber/cooker high 3min. The image shows gladular cells of the pancreas membraneous and cytoplasmic staining cells.

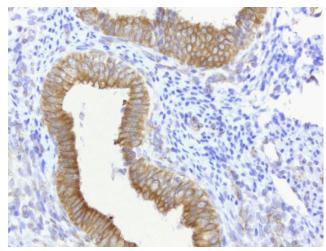


Immunohistochemical staining of paraffinembedded of human lymph node using anti-CDH2 clone UMAB23 mouse monoclonal antibody at 1:400 dilution of 1.0mg/mL using Polink2 Broad HRP DAB detection kit. UM500023 requires heat-induced epitope retrieval with Citrate pH6.0 in a pressure chamber/cooker high 3min. The image shows cells of the lymph node are negative. Positive staining seen in the endothelial cells, mostly membraneous with weak cytoplasmic.

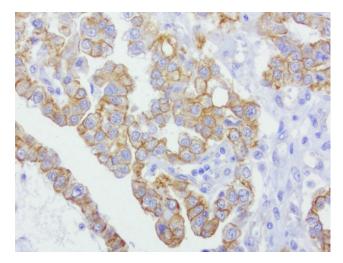




Immunohistochemical staining of paraffinembedded of human carcinoma of the lung using anti-CDH2 clone UMAB23 mouse monoclonal antibody at 1:400 dilution of 1.0mg/mL using Polink2 Broad HRP DAB detection kit. UM500023 requires heat-induced epitope retrieval with Citrate pH6.0 in a pressure chamber/cooker high 3min. The image shows the tumor cells with membraneous and cytoplasmic staining.

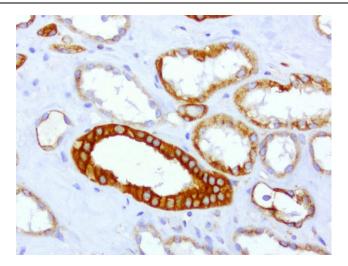


Immunohistochemical staining of paraffinembedded of human endometrium using anti-CDH2 clone UMAB23 mouse monoclonal antibody at 1:400 dilution of 1.0mg/mL using Polink2 Broad HRP DAB detection kit. UM500023 requires heat-induced epitope retrieval with Citrate pH6.0 in a pressure chamber/cooker high 3min. The image shows strong membranous and cytoplsamic staining of the endometrial cells.

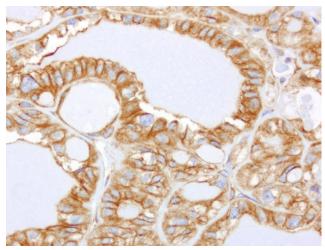


Immunohistochemical staining of paraffinembedded of human ovarian carcinoma using anti-CDH2 clone UMAB23 mouse monoclonal antibody at 1:400 dilution of 1.0mg/mL using Polink2 Broad HRP DAB detection kit. UM500023 requires heat-induced epitope retrieval with Citrate pH6.0 in a pressure chamber/cooker high 3min. The image shows strong membranous and cytoplsamic staining of the tumor cells

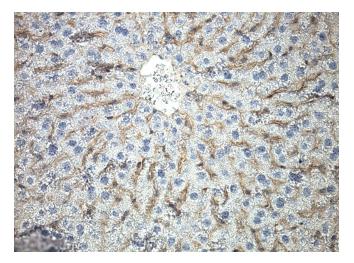




Immunohistochemical staining of paraffinembedded of human kidney using anti-CDH2 clone UMAB23 mouse monoclonal antibody at 1:400 dilution of 1.0mg/mL using Polink2 Broad HRP DAB detection kit. UM500023 requires heatinduced epitope retrieval with Citrate pH6.0 in a pressure chamber/cooker high 3min. The image shows strong membranous and cytoplsamic staining in the kidney tubules

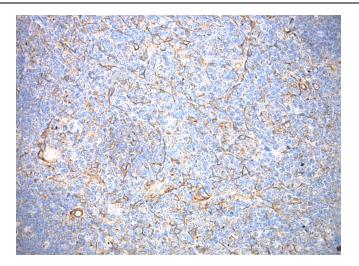


Immunohistochemical staining of paraffinembedded of human thyroid carcinoma using anti-CDH2 clone UMAB23 mouse monoclonal antibody at 1:400 dilution of 1.0mg/mL using Polink2 Broad HRP DAB detection kit. UM500023 requires heat-induced epitope retrieval with Citrate pH6.0 in a pressure chamber/cooker high 3min. The image shows strong membranous and cytoplsamic staining of the tumor cells

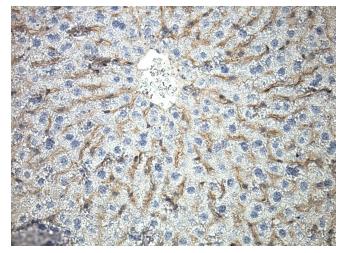


Immunohistochemical staining of paraffinembedded mouse lung tissue using anti-CDH2 clone UMAB23 mouse monoclonal antibody. HIER ACCEL buffer ([B22C-125]) (pH8.7) at 110C for 10 min, UM500023 (1:100). Detection was done with Klear Mouse (C/N [D52-18]) DAB Kit.

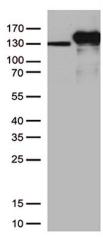




Immunohistochemical staining of paraffinembedded mouse spleen tissue using anti-CDH2 clone UMAB23 mouse monoclonal antibody. HIER ACCEL buffer ([B22C-125]) (pH8.7) at 110C for 10 min, UM500023 (1:100). Detection was done with Klear Mouse (C/N [D52-18]) DAB Kit.

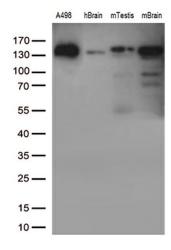


Immunohistochemical staining of paraffinembedded mouse liver tissue using anti-CDH2 clone UMAB23 mouse monoclonal antibody. HIER TEE buffer pH9 ([B21-100]) at 110C for 10 min, UM500023 (1:100). Detection was done with Klear Mouse (C/N [D52-18]) DAB Kit.

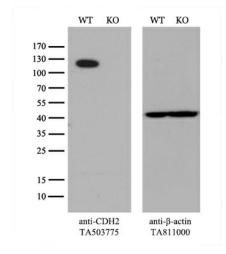


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CDH2 ([RC207170], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CDH2 mouse monoclonal antibody (1:1000).

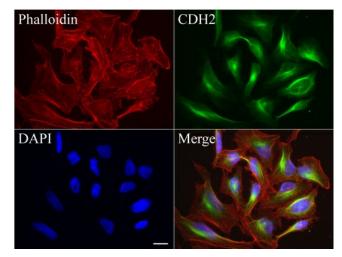




Western blot analysis of extracts (35ug) from cell line and tissues by using anti-CDH2 monoclonal antibody (1:500).

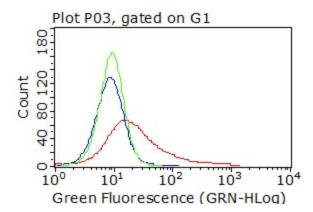


Equivalent amounts of cell lysates (10 ug per lane) of wild-type 293T cells (WT, Cat# LC810293T) and CDH2-Knockout 293T cells (KO, Cat# [LC840285]) were separated by SDS-PAGE and immunoblotted with anti-CDH2 monoclonal antibody UM500023, (1:500). Then the blotted membrane was stripped and reprobed with antib-actin antibody ([TA811000]) as a loading control.



Immunofluorescent staining of HeLa cells using anti-CDH2 mouse monoclonal antibody (UM500023, green, 1:50). Actin filaments were labeled with Alexa Fluor® 594 Phalloidin (red), and nuclear with DAPI (blue). Scale bar, 20µm.





Living HEK293T cells transfected with either [RC207170] plasmid (red) or empty vector (blue) were immunostained by anti-CDH2 antibody (UM500023) or isotype control antibody (green), and then analyzed by flow cytometry (1:50).