

## **E-cadherin Polyclonal Antibody**

Catalog No: YT1454

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: E-cadherin

Fields: >>Rap1 signaling pathway;>>Apelin signaling pathway;>>Hippo signaling

pathway:>>Cell adhesion molecules:>>Adherens junction:>>Bacterial invasion of

epithelial cells;>>Pathways in cancer;>>Endometrial cancer;>>Thyroid

cancer;>>Melanoma;>>Bladder cancer;>>Gastric cancer

Gene Name: CDH1

Protein Name: Cadherin-1

Human Gene Id: 999

**Human Swiss Prot** 

No:

Mouse Gene Id: 12550

**Mouse Swiss Prot** 

No:

t P09803

P12830

Rat Swiss Prot No: Q9R0T4/Q9Z1Y3/Q63149

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

Cadherin. AA range:833-882

**Specificity:** E-cadherin Polyclonal Antibody detects endogenous levels of E-cadherin

protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. IHC: 1:100-300 ELISA: 1:20000. IF 1:100-300 Not yet



tested in other applications.

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 125-130kD

Cell Pathway: Cell adhesion molecules (CAMs); Adherens\_Junction; Pathogenic Escherichia

coli infection;Pathways in cancer;Endometrial cancer;Thyroid

cancer; Melanoma; Bladder cancer;

Background: This gene encodes a classical cadherin of the cadherin superfamily. Alternative

splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate the mature glycoprotein. This calcium-dependent cell-cell adhesion protein is 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 of this gene is thought to contribute to cancer progression 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. This

gene is present in a gene cluster with other members of the cadherin family on

chromosome 16. [provided by RefSeq, Nov 2015],

**Function:** disease:Defects in CDH1 are a cause of gastric cancer [MIM:137215]; also

known as hereditary familial diffuse gastric cancer (HDGC)., disease: Defects in

CDH1 are a cause of susceptibility to endometrial cancer

[MIM:608089]., disease: Defects in CDH1 are associated with ovarian cancer [MIM:167000]. Ovarian cancer is the leading cause of death from gynecologic malignancy. It is characterized by advanced presentation with loco-regional dissemination in the peritoneal cavity and the rare incidence of visceral metastases. These typical features relate to the biology of the disease, which is a principal determinant of outcome., disease: Defects in CDH1 are involved in dysfunction of the cell-cell adhesion system, triggering cancer invasion (gastric, breast, ovary, endometrium and thyroid) and metastasis., function: Cadherins are

calcium dependent cell adhesion proteins.,function:Cadherins are calcium

Subcellular Location:

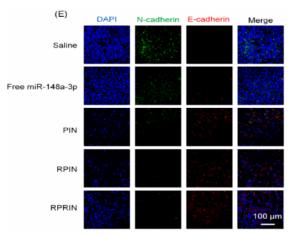
Cell junction, adherens junction. Cell membrane; Single-pass type I membrane protein. Endosome. Golgi apparatus, trans-Golgi network. Colocalizes with DLGAP5 at sites of cell-cell contact in intestinal epithelial cells. Anchored to actin microfilaments through association with alpha-, beta- and gamma-catenin. Sequential proteolysis induced by apoptosis or calcium influx, results in translocation from sites of cell-cell contact to the cytoplasm. Colocalizes with



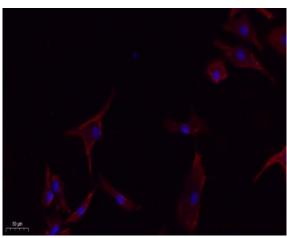
RAB11A endosomes during its transport from the Golgi apparatus to the plasma membrane.

**Expression:** Non-neural epithelial tissues.

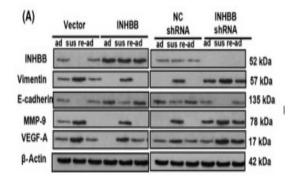
## **Products Images**



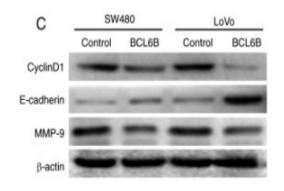
The mirrored cationic peptide as miRNA vehicle for efficient lung cancer therapy. Lu Liang IF Mouse NCI-H1299 cell-xenograft



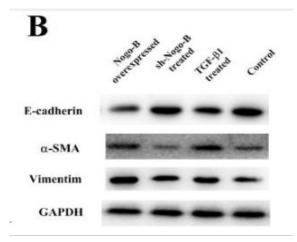
Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, Picture B: DAPI(blue) 10min.



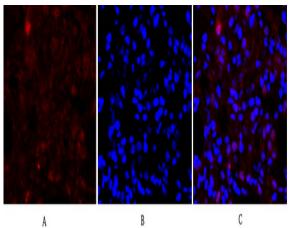
Zou, Guoying, et al. "Inhibin B suppresses anoikis resistance and migration through the transforming growth factor- $\beta$  signaling pathway in nasopharyngeal carcinoma." Cancer science 109.11 (2018): 3416.



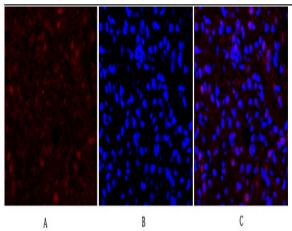
Gu, Yue, et al. "BCL6B suppresses proliferation and migration of colorectal carcinoma cells through inhibition of the PI3K/AKT signaling pathway." International journal of molecular medicine 41.5 (2018): 2660-2668.



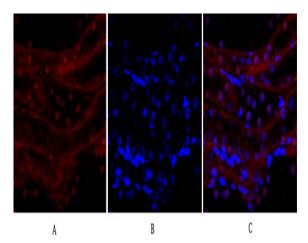
Xiong, Ye, et al. "NOGO-B promotes EMT in lung fibrosis via MMP14 mediates free TGF-beta1 formation." Oncotarget 8.41 (2017): 71024.



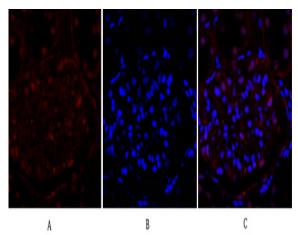
Immunofluorescence analysis of rat-lung tissue. 1,E-cadherin Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



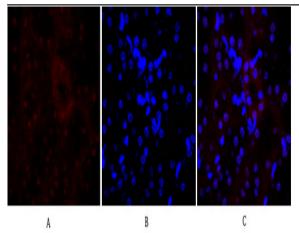
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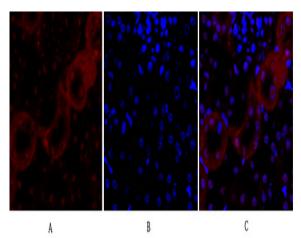
Immunofluorescence analysis of rat-kidney tissue. 1,E-cadherin Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



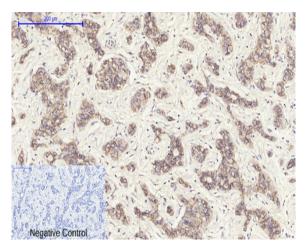
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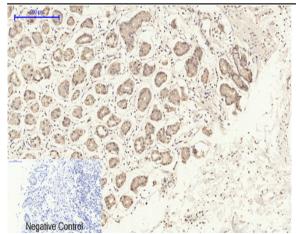
Immunofluorescence analysis of mouse-kidney tissue. 1,E-cadherin Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



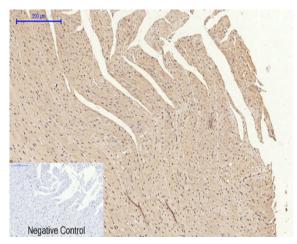
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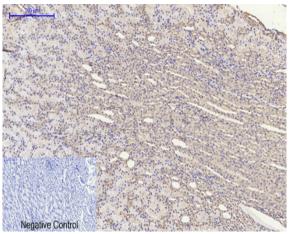
Immunohistochemical analysis of paraffin-embedded Human-liver-cancer tissue. 1,E-cadherin Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



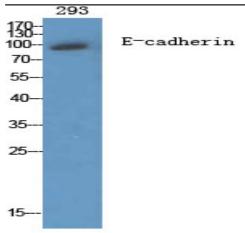
Immunohistochemical analysis of paraffin-embedded Humanstomach tissue. 1,E-cadherin Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



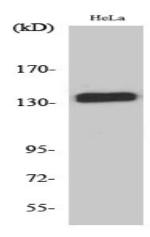
Immunohistochemical analysis of paraffin-embedded Rat-heart tissue. 1,E-cadherin Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



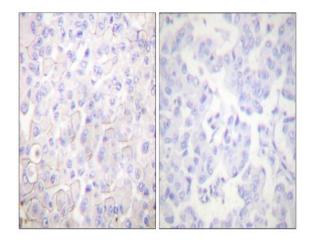
Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,E-cadherin Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



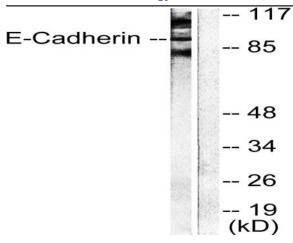
Western Blot analysis of 293 cells using E-cadherin Polyclonal Antibody diluted at 1:2000



Western Blot analysis of HeLa cells using E-cadherin Polyclonal Antibody diluted at 1:2000



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using Cadherin-pan Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from NIH/3T3 cells, using Cadherin-pan Antibody. The lane on the right is blocked with the synthesized peptide.