

E-cadherin Rabbit pAb

CatalogNo: YT1454

Orthogonal Validated 

Key Features

Host Species

- Rabbit

Reactivity

- Human, Mouse, Rat

Applications

- WB, IHC, IF, ELISA

MW

- 125-130kD (Observed)

Isotype

- IgG

Recommended Dilution Ratios

WB 1:500-1:2000**IHC: 1:100-300****ELISA 1:20000****IF 1:100-300****Not yet tested in other applications.**

Storage

Storage*

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

Formulation

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

Basic Information

Clonality

Polyclonal

Immunogen Information

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.

| Target Information

Gene name CDH1

Protein Name Cadherin-1

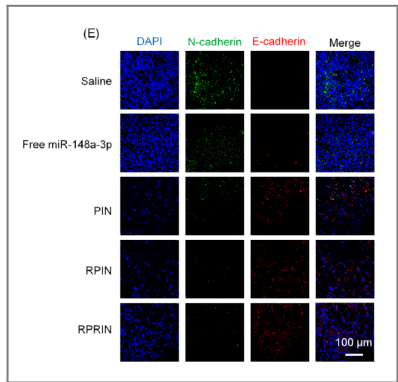
Organism	Gene ID	UniProt ID
Human	999 ;	P12830 ;
Mouse	12550 ;	P09803 ;
Rat	Q9R0T4 ; Q9Z1Y3 ; Q63149 ;	

Cellular Localization 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.

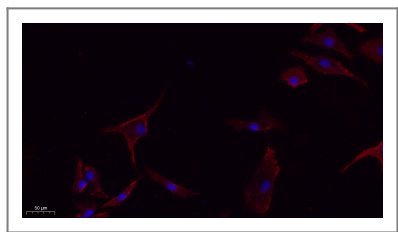
Tissue specificity Non-neural epithelial tissues.

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-dependent cell adhesion proteins. They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the sorting of heterogeneous cell types. CDH1 is involved in mechanisms regulating cell-cell adhesions, mobility and proliferation of epithelial cells. Has a potent invasive suppressor role. It is a ligand for integrin alpha-E/beta-7.,Function:E-Cad/CTF2 promotes non-amyloidogenic degradation of Abeta precursors. Has a strong inhibitory effect on APP C99 and C83 production.,online information:E-cadherin entry,PTM:During apoptosis or with calcium influx, cleaved by a membrane-bound metalloproteinase (ADAM10), PS1/gamma-secretase and caspase-3 to produce fragments of about 38 kDa (E-CAD/CTF1), 33 kDa (E-CAD/CTF2) and 29 kDa (E-CAD/CTF3), respectively. Processing by the metalloproteinase, induced by calcium influx, causes disruption of cell-cell adhesion and the subsequent release of beta-catenin into the cytoplasm. The residual membrane-tethered cleavage product is rapidly degraded via an intracellular proteolytic pathway. Cleavage by caspase-3 releases the cytoplasmic tail resulting in disintegration of the actin microfilament system. The gamma-secretase-mediated cleavage promotes disassembly of adherens junctions.,similarity:Contains 5 cadherin domains.,subcellular location: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.,subunit:Homodimer; disulfide-linked. Interacts directly, via the cytoplasmic domain, with CTNNB1 or JUP to form the PSEN1/cadherin/catenin adhesion complex which connects to the actin skeleton through the actin binding of alpha-catenin. Interaction with PSEN1, cleaves CDH1 resulting in the disassociation of cadherin-based adherens junctions (CAJs). Interacts with AJAP1, CTNND1 and DLGAP5.,tissue specificity:Non-neural epithelial tissues.,

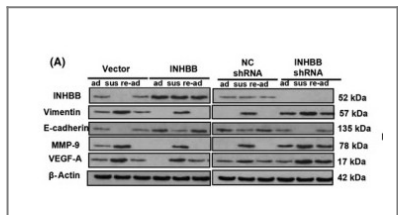
Validation Data



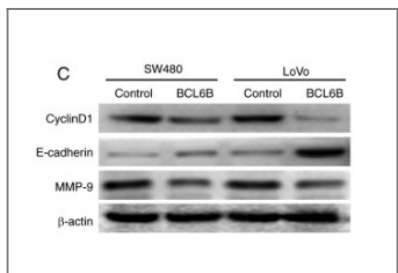
The mirrored cationic peptide as miRNA vehicle for efficient lung cancer therapy. Lu Liang IF Mouse NCI-H1299 cell-xenograft



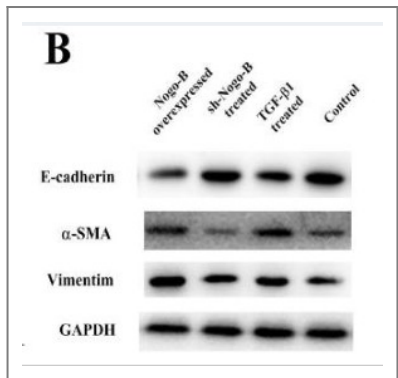
Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, DAPI(blue) 10min.



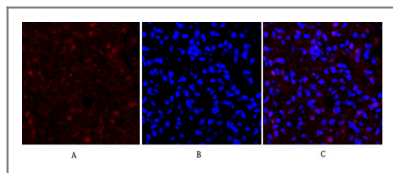
Zou, Guoying, et al. "Inhibin B suppresses anoikis resistance and migration through the transforming growth factor- β signaling pathway in nasopharyngeal carcinoma." Cancer science 109.11 (2018): 3416.



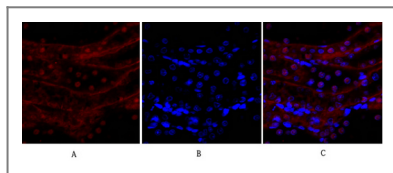
Gu, Yue, et al. "BCL6B suppresses proliferation and migration of colorectal carcinoma cells through inhibition of the PI3K/AKT signaling pathway." International journal of molecular medicine 41.5 (2018): 2660-2668.



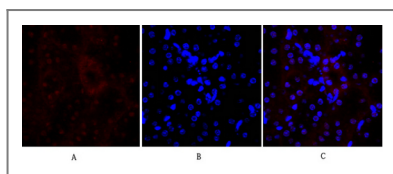
Xiong, Ye, et al. "NOGO-B promotes EMT in lung fibrosis via MMP14 mediates free TGF-beta1 formation." Oncotarget 8.41 (2017): 71024.



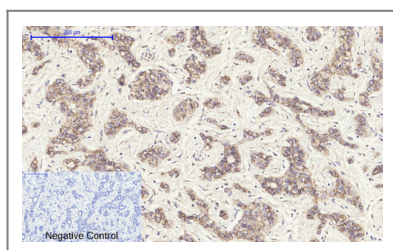
Immunofluorescence analysis of rat-lung tissue. 1,E-cadherin Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



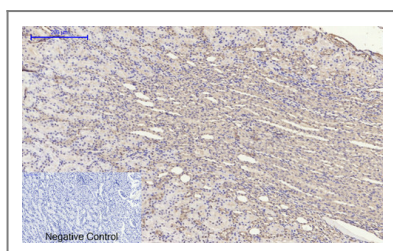
Immunofluorescence analysis of rat-kidney tissue. 1,E-cadherin Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



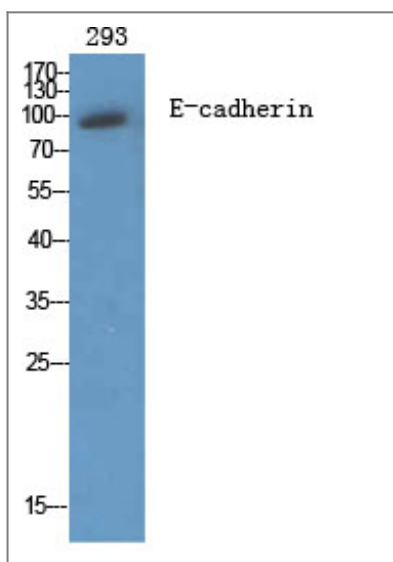
Immunofluorescence analysis of mouse-kidney tissue. 1,E-cadherin Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



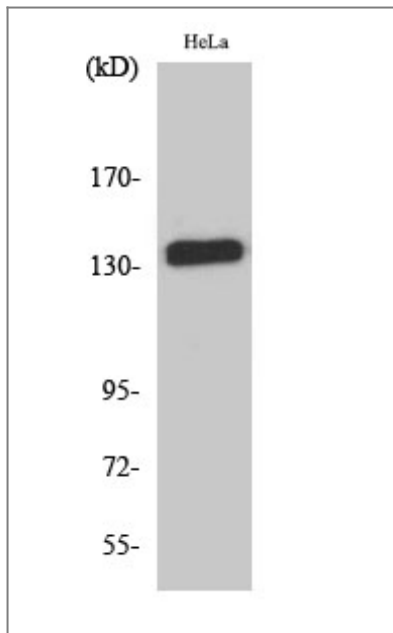
Immunohistochemical analysis of paraffin-embedded Human-liver-cancer tissue. 1,E-cadherin Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control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



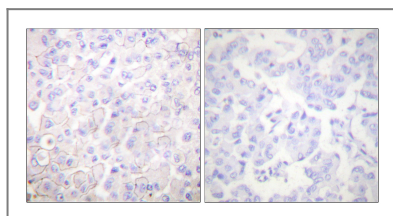
Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,E-cadherin Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used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

Contact information

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Please scan the QR code to access additional product information:
E-cadherin Rabbit pAb

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