

For Research Use Only

# E-cadherin Recombinant antibody

Catalog Number: 80541-5-RR

3 Publications



## Basic Information

|   |  |   |
|---|--|---|
| <b>Catalog Number:</b><br>80541-5-RR        | <b>GenBank Accession Number:</b><br>BC141838                     | <b>Purification Method:</b><br>Protein A purification |
| <b>Concentration:</b><br>1000 ug/ml         | <b>GeneID (NCBI):</b><br>999                                     | <b>CloneNo.:</b><br>240159C10                         |
| <b>Source:</b><br>Rabbit                    | <b>UNIPROT ID:</b><br>P12830                                     | <b>Recommended Dilutions:</b><br>WB 1:5000-1:50000    |
| <b>Isotype:</b><br>IgG                      | <b>Full Name:</b><br>cadherin 1, type 1, E-cadherin (epithelial) | <b>IHC 1:200-1:800</b><br><b>IF/ICC 1:250-1:1000</b>  |
| <b>Immunogen Catalog Number:</b><br>AG14973 | <b>Calculated MW:</b><br>882 aa, 97 kDa                          |   |
|   | <b>Observed MW:</b><br>135 kDa                                   |   |

## Applications

|   |  |
|---|--|
| <b>Tested Applications:</b><br>WB, IHC, IF/ICC, ELISA | <b>Positive Controls:</b><br><b>WB :</b> HCT 116 cells, Caco-2 cells, A431 cells, T-47D cells, MCF-7 cells |
| <b>Cited Applications:</b><br>WB, IF                  | <b>IHC :</b> human stomach cancer tissue,  |
| <b>Species Specificity:</b><br>human                  | <b>IF/ICC :</b> MCF-7 cells,   |
| <b>Cited Species:</b><br>human, mouse                 |  |

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

Cadherins are a family of transmembrane glycoproteins that mediate calcium-dependent cell-cell adhesion and play an important role in the maintenance of normal tissue architecture. E-cadherin (epithelial cadherin), also known as CDH1 (cadherin 1) or CAM 120/80, is a classical member of the cadherin superfamily which also include N-, P-, R-, and B-cadherins. E-cadherin is expressed on the cell surface in most epithelial tissues. The extracellular region of E-cadherin establishes calcium-dependent homophilic trans binding, providing specific interaction with adjacent cells, while the cytoplasmic domain is connected to the actin cytoskeleton through the interaction with p120-,  $\alpha$ -,  $\beta$ -, and  $\gamma$ -catenin (plakoglobin). E-cadherin is important in the maintenance of the epithelial integrity, and is involved in mechanisms regulating proliferation, differentiation, and survival of epithelial cell. E-cadherin may also play a role in tumorigenesis. It is considered to be an invasion suppressor protein and its loss is an indicator of high tumor aggressiveness.

## Notable Publications

| Author         | Pubmed ID | Journal                 | Application |
|----------------|-----------|-------------------------|-------------|
| MengHua Li     | 39948392  | Sci Rep                 | WB,IF       |
| Chu Hao        | 39912944  | J Cancer Res Clin Oncol | WB          |
| Shansong Huang | 39827204  | Sci Rep                 | WB          |

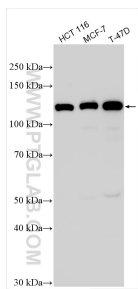
## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

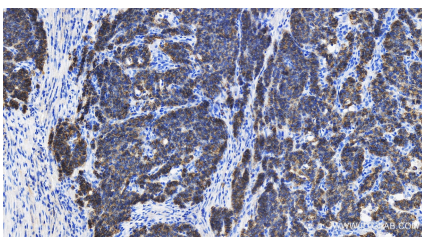
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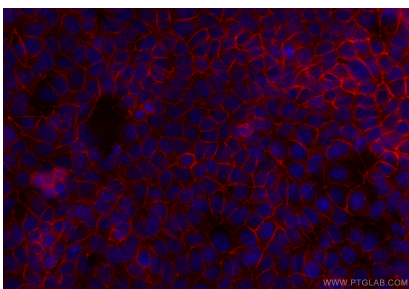
## Selected Validation Data



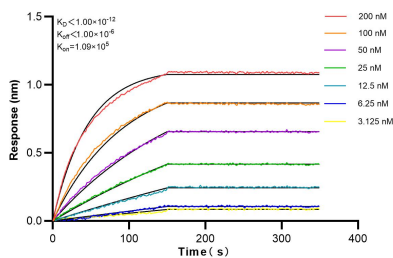
Various lysates were subjected to SDS PAGE followed by western blot with 80541-5-RR (E-cadherin antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 80541-5-RR (E-cadherin antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed MCF-7 cells using E-cadherin antibody (80541-5-RR, Clone: 240159C10) at dilution of 1:500 and CoraLite® 594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4).



Biolayer interferometry (BLI) kinetic assays of 80541-5-RR against Human E-cadherin were performed. The affinity constant is below 1 pM.