

For Research Use Only

# E-cadherin Recombinant antibody

Catalog Number: 80541-7-RR **1 Publications**



## Basic Information

<b>Catalog Number:</b> 80541-7-RR	<b>GenBank Accession Number:</b> BC141838	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 400 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 999	<b>CloneNo.:</b> 240159A1
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P12830	<b>Recommended Dilutions:</b> WB 1:1000-1:8000 IHC 1:200-1:800 IF/ICC 1:50-1:500
<b>Isotype:</b> IgG	<b>Full Name:</b> cadherin 1, type 1, E-cadherin (epithelial)	
<b>Immunogen Catalog Number:</b> AG14973	<b>Calculated MW:</b> 882 aa, 97 kDa	
	<b>Observed MW:</b> 135 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, ELISA	<b>Positive Controls:</b> WB : Caco-2 cells, A431 cells, T-47D cells IHC : human stomach cancer tissue, IF/ICC : MCF-7 cells,
<b>Cited Applications:</b> WB	
<b>Species Specificity:</b> human	
<b>Cited Species:</b> 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
Xiaowei Zhang	39347955	Am J Chin Med	WB

## Storage

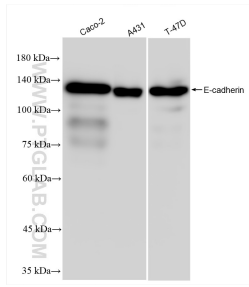
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

**\*\*\* 20ul sizes contain 0.1% BSA**

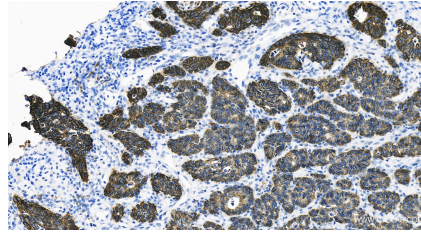
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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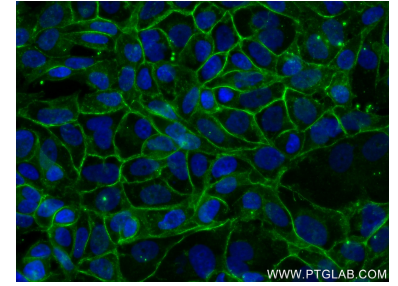
## Selected Validation Data



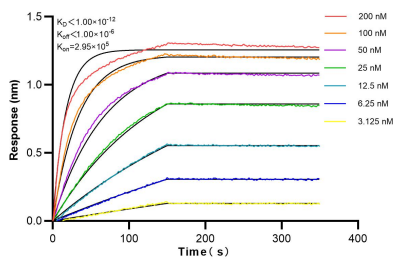
Various lysates were subjected to SDS PAGE followed by western blot with 80541-7-RR (E-cadherin antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 80541-7-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 (4% PFA) fixed MCF-7 cells using E-cadherin antibody (80541-7-RR, Clone: 240159A1) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Biolayer interferometry (BLI) kinetic assays of 80541-7-RR against Human E-cadherin were performed. The affinity constant is below 1 pM.