

For Research Use Only

# E-cadherin Recombinant antibody, PBS Only

Catalog Number: 80541-9-PBS



## Basic Information

<b>Catalog Number:</b> 80541-9-PBS	<b>GenBank Accession Number:</b> BC141838	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 999	<b>CloneNo.:</b> 240159G8
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P12830	
<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	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, ELISA

**Species Specificity:**  
human

## 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.

## Storage

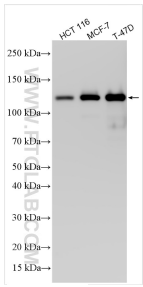
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS only

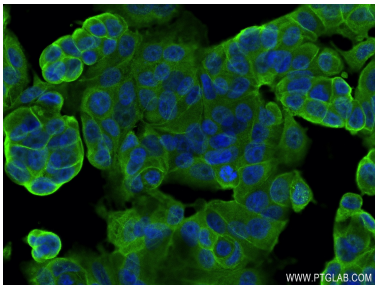
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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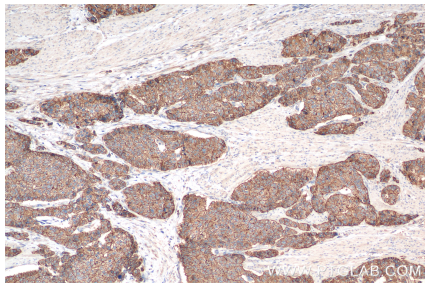
Selected Validation Data



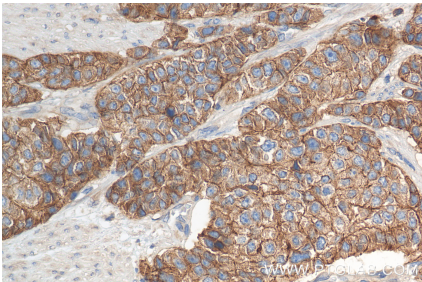
Various lysates were subjected to SDS PAGE followed by western blot with 80541-9-RR (E-cadherin antibody) at dilution of 1:70000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 80541-9-PBS in a different storage buffer formulation.



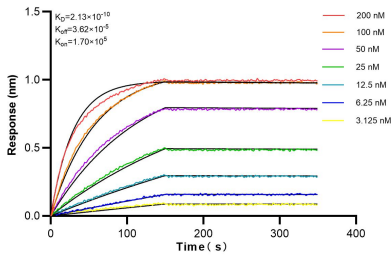
Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using E-cadherin antibody (80541-9-RR, Clone: 240159G8 ) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1). This data was developed using the same antibody clone with 80541-9-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 80541-9-RR (E-cadherin antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 80541-9-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 80541-9-RR (E-cadherin antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 80541-9-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 80541-9-RR against Human E-cadherin were performed. The affinity constant is 0.213 nM.