

For Research Use Only

# E-cadherin Recombinant antibody, PBS Only (Capture)

Catalog Number: 80541-5-PBS



## Basic Information

<b>Catalog Number:</b> 80541-5-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> 240159C10
<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	
	<b>Observed MW:</b> 135 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, Cytometric bead array, Indirect ELISA

**Species Specificity:**  
human

## Product Information

80541-5-PBS targets E-cadherin as part of a matched antibody pair:

MP00187-1: 80541-5-PBS capture and 80541-2-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## 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.

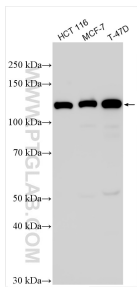
## Storage

**Storage:**  
Store at -80°C.  
**Storage Buffer:**  
PBS Only

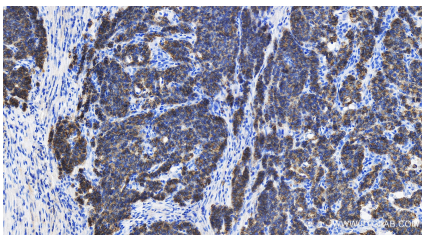
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

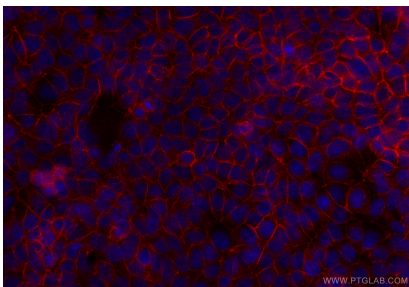
Selected Validation Data



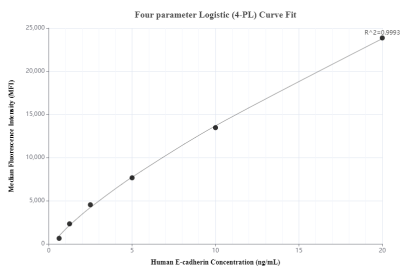
Various lysates were subjected to SDS PAGE followed by western blot with 80541-5-RR (E-cadherin antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 80541-5-PBS in a different storage buffer formulation.



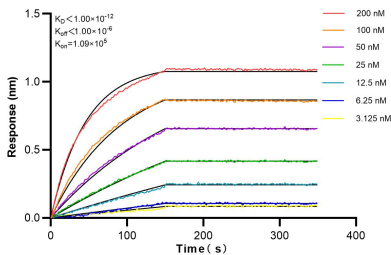
Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 80541-5-RR (E-cadherin antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 80541-5-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 80541-5-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00187-1, E-cadherin Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 80541-5-PBS. Detection antibody: 80541-2-PBS. Standard: Ag14973. Range: 0.625-20 ng/mL.



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