

For Research Use Only

# E-cadherin Polyclonal antibody

Catalog Number: 20648-1-AP **6 Publications**



## Basic Information

<b>Catalog Number:</b> 20648-1-AP	<b>GenBank Accession Number:</b> NM_004360	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 200 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 999	<b>Recommended Dilutions:</b> WB 1:500-1:1000 IHC 1:50-1:200 IF 1:10-1:100
<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>Calculated MW:</b> 97 kDa	
	<b>Observed MW:</b> 100-125 kDa	

## Applications

<b>Tested Applications:</b> WB, IF, FC, IHC, ELISA	<b>Positive Controls:</b> WB : PC-3 cells, IHC : human colon cancer tissue, human liver cancer tissue IF : HepG2 cells,
<b>Cited Applications:</b> WB, IF	
<b>Species Specificity:</b> human, mouse, rat	
<b>Cited Species:</b> 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

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. It has been regarded as a marker for spermatogonial stem cells in mice (PMID:23509752). 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. This antibody is specific to CDH1.

## Notable Publications

Author	Pubmed ID	Journal	Application
Wenhua Huang	36293081	Int J Mol Sci	WB
Tianming Liu	26459119	Mol Med Rep	WB
Thankam S Nair	34371293	Tissue Cell	IF

## Storage

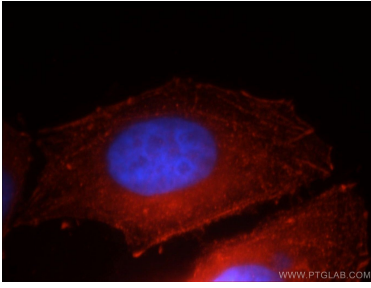
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

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

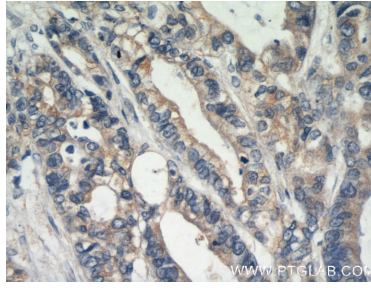
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

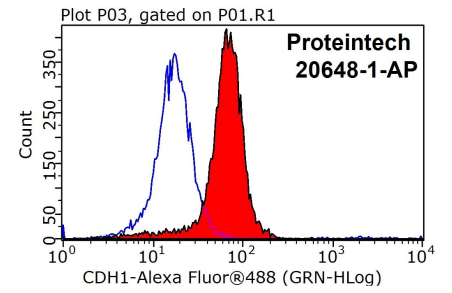
## Selected Validation Data



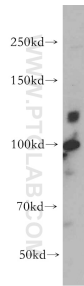
Immunofluorescent analysis of HepG2 cells, using CDH1 antibody 20648-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).



Immunohistochemical analysis of paraffin-embedded human colon cancer using 20648-1-AP (E-cadherin antibody) at dilution of 1:50 (under 40x lens).



1X10<sup>6</sup> HepG2 cells were stained with 0.2ug E-cadherin antibody (20648-1-AP, red) and control antibody (blue). Fixed with 4% PFA blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:200.



PC-3 cells were subjected to SDS PAGE followed by western blot with 20648-1-AP (E-cadherin antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.