

For Research Use Only

E-cadherin Recombinant antibody

Catalog Number: 83991-4-RR



Basic Information

Catalog Number: 83991-4-RR	GenBank Accession Number: NM_004360.5	Purification Method: Protein A purification
Size: 100ul, Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 999	CloneNo.: 241098G6
Source: Rabbit	UNIPROT ID: P12830-1	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:500-1:2000 IF/ICC 1:200-1:800
Isotype: IgG	Full Name: cadherin 1, type 1, E-cadherin (epithelial)	
	Calculated MW: 97 kDa	
	Observed MW: 135 kDa	

Applications

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

Species Specificity:
human

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

Positive Controls:

WB: A431 cells, HepG2 cells, T-47D cells, HCT 116 cells

IHC: human colon cancer tissue, human ovary cancer tissue

IF/ICC: A431 cells, MCF-7 cells

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-, α -, β -, and γ -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 -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

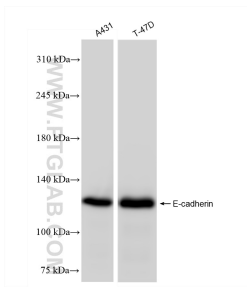
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

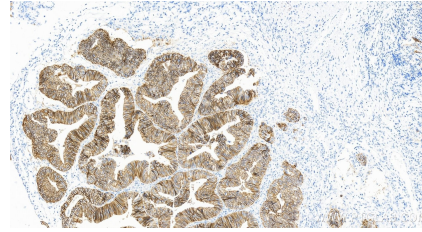
E: proteintech@ptglab.com
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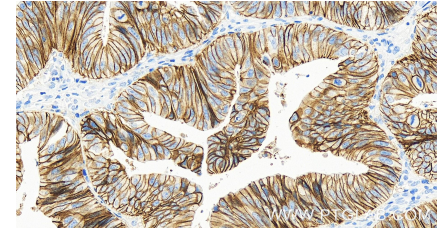
Selected Validation Data



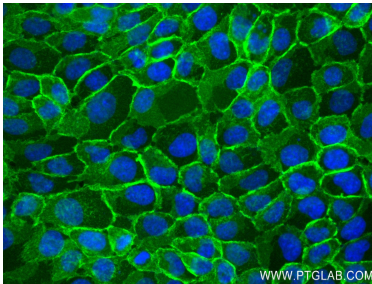
Various lysates were subjected to SDS PAGE followed by western blot with 83991-4-RR (E-cadherin antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



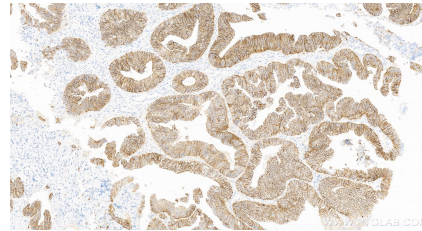
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 83991-4-RR (E-cadherin antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



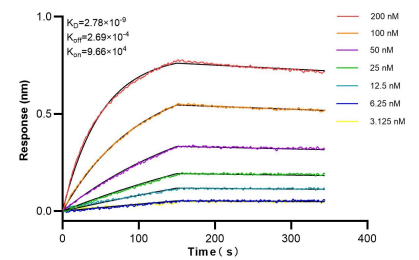
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 83991-4-RR (E-cadherin antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed A431 cells using E-cadherin antibody (83991-4-RR, Clone: 241098G6) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 83991-4-RR (E-cadherin antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Bi-layer interferometry (BLI) kinetic assays of 83991-4-RR against Human E-cadherin were performed. The affinity constant is 2.78 nM.