## For Research Use Only

## E-cadherin Recombinant antibody

Catalog Number:80541-9-RR



**Basic Information** 

Catalog Number: GenBank Accession Number:

80541-9-RR BC141838
Size: Genel D (NCBI):

100ul , Concentration: 1000 ug/ml by 999
Nanodrop;
UNIPROT ID:

Source: P12830
Rabbit Full Name:

Isotype: cadherin 1, type 1, E-cadherin 1gG (epithelial)

IgG (epithelial)
Immunogen Catalog Number: Calculated MW:
AG14973 882 aa, 97 kDa
Observed MW:

130 kDa

WB 1:20000-1:100000 IHC 1:200-1:800 IF/ICC 1:125-1:500

Recommended Dilutions:

**Purification Method:** 

Protein A purfication

CloneNo.:

240159G8

**Applications** 

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

Species Specificity:

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: HCT 116 cells, Caco-2 cells, MKN-45 cells, A431 cells, T-47D cells, MCF-7 cells, A549 cells, HepG2 cells

IHC: human stomach cancer tissue,

IF/ICC: 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-,  $\alpha$ -,  $\beta$ -, 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 -20°C. Stable for one year after shipment.

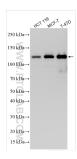
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3  $\,$ 

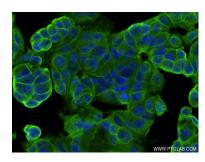
Aliquoting is unnecessary for -20°C storage

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

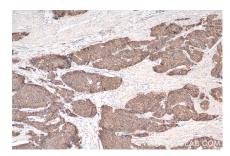
## **Selected Validation Data**



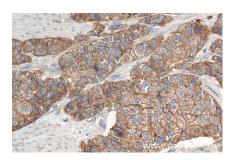
Various lysates were subjected to SDS PAGE followed by western blot with 80541-9-RR (E-cadherin antibody) at dilution of 1:70000 incubated at room temperature for 1.5 hours.



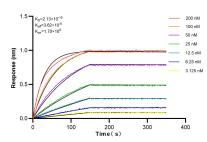
Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using E-cadherin antibody (80541-9-RR, Clone: 240159G8) at dilution of 1:250 and CoraLite®488-Conjugated Affini Pure Goat Anti-Mouse IgG(H+L) (SA00013-1).



Immunohistochemical analysis of paraffinembedded 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).



Immunohistochemical analysis of paraffinembedded 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).



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