For Research Use Only

## Mouse E-Cadherin Recombinant antibody, PBS Only (Detector)

Catalog Number:84111-2-PBS



**Purification Method:** 

CloneNo.:

241282A8

Protein A purification

**Basic Information** 

**Applications** 

Catalog Number: GenBank Accession Number: 84111-2-PBS NM\_009864.3

Concentration: Genel D (NCBI): 1 mg/ml 12550

Source: UNIPROT ID:
Rabbit P09803
Isotype: Full Name:
IgG cadherin 1
Immunogen Catalog Number: Calculated MW:
EG0975 98kDa

Observed MW: 135 kDa

WB, IHC, IF/ICC, Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity: human, mouse

**Tested Applications:** 

**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. E-cadherin is sensitive to trypsin digestion in the absence of Ca2+.

Storage

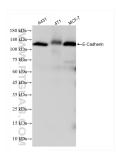
Storage:

Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C Storage Buffer.

PBS only, pH7.3

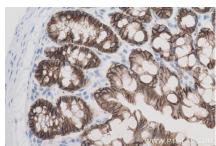
## Selected Validation Data



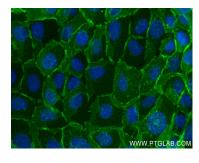
Various lysates were subjected to SDS PAGE followed by western blot with 84111-2-RR (E-Cadherin antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84111-2-PBS in a different storage buffer formulation.



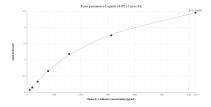
Immunohistochemical analysis of paraffinembedded mouse colon tissue slide using 84111-2-RR (E-Cadherin antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84111-2-PBS in a different storage buffer formulation.



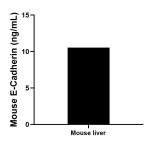
Immunohistochemical analysis of paraffinembedded mouse colon tissue slide using 84111-2-RR (E-Cadherin antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84111-2-PBS in a different storage buffer formulation.



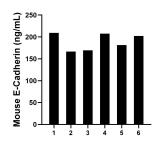
Immunofluorescent analysis of (4% PFA) fixed A431 cells using E-Cadherin antibody (84111-2-RR, Clone: 241282A8) at dilution of 1:250 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 84111-2-PBS in a different storage buffer formulation.



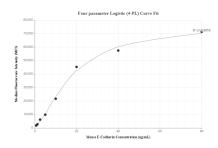
Sandwich ELISA standard curve of MP01047-2, Mouse E-Cadherin Recombinant Matched Antibody Pair - PBS only. 84111-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg0975. 84111-2-PBS was HRP conjugated as the detection antibody. Range: 9.77-625 pg/ml.



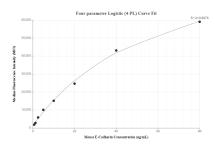
The mean E-Cadherin concentration was determined to be 10.6 ng/mL in mouse liver tissue extract based on a 5.0 mg/mL extract load.



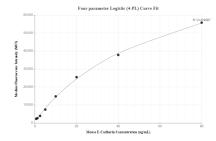
Serum of six mice was measured. The E-Cadherin concentration of detected samples was determined to be 189.4 ng/mL with a range of 166.7-209.1 ng/mL

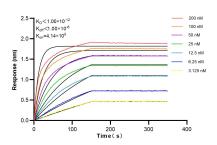


Cytometric bead array standard curve of MP01047-1, MOUSE E-Cadherin Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84111-4-PBS. Detection antibody: 84111-2-PBS. Standard: Eg0975. Range: 0.625-80 ng/mL



Cytometric bead array standard curve of MP01047-2, MOUSE E-Cadherin Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84111-1PBS. Detection antibody: 84111-2-PBS. Standard: Eg0975. Range: 0.625-80 ng/mL





Cytometric bead array standard curve of MP01047-3, MOUSE E-Cadherin Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84111-3-PBS. Detection antibody: 84111-2-PBS. Standard: Eg0975. Range: 0.625-80 ng/mL

Biolayer interferometry (BLI) kinetic assays of 84111-2-RR against Mouse E-Cadherin were performed. The affinity constant is below 1 pM.