

For Research Use Only

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

Catalog Number: 84646-3-PBS



## Basic Information

<b>Catalog Number:</b> 84646-3-PBS	<b>GenBank Accession Number:</b> NM_031334.1	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 83502	<b>CloneNo.:</b> 242018D3
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q9ROT4	
<b>Isotype:</b> IgG	<b>Full Name:</b> cadherin 1	
<b>Immunogen Catalog Number:</b> EG1229	<b>Calculated MW:</b> 99 kDa	
	<b>Observed MW:</b> 125 kDa	

## Applications

**Tested Applications:**  
WB, IHC, Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

**Species Specificity:**  
human, rat

## Product Information

84646-3-PBS targets E-Cadherin as part of a matched antibody pair:

MP01483-1: 84646-1-PBS capture and 84646-3-PBS detection (validated in Cytometric bead array, Sandwich ELISA)

MP01483-2: 84646-2-PBS capture and 84646-3-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.

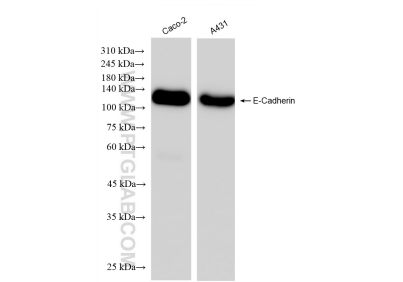
## Storage

**Storage:**  
Store at -80°C.  
**Storage Buffer:**  
PBS only, pH7.3

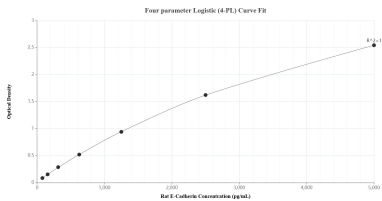
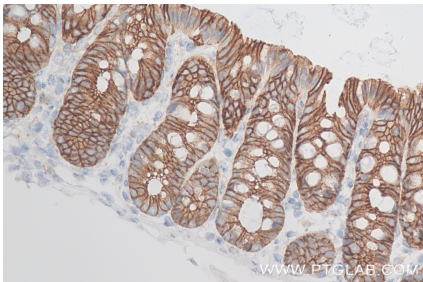
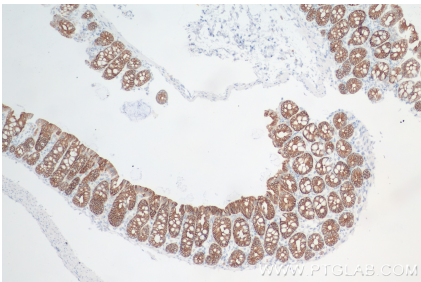
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

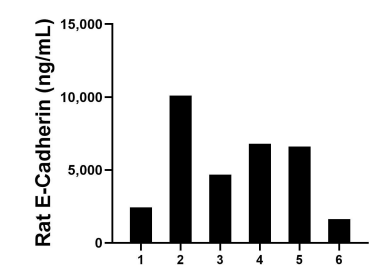
Selected Validation Data



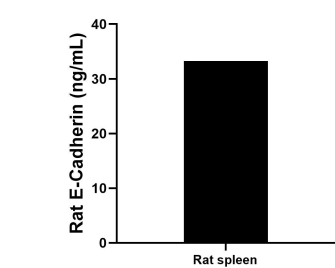
Various lysates were subjected to SDS PAGE followed by western blot with 84646-3-RR (E-Cadherin antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84646-3-PBS in a different storage buffer formulation.



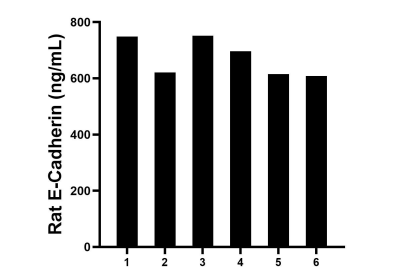
Sandwich ELISA standard curve of MP01483-1, Rat E-Cadherin Recombinant Matched Antibody Pair - PBS only. 84646-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg1229. 84646-3-PBS was HRP conjugated as the detection antibody. Range: 78.1-5000 pg/mL.



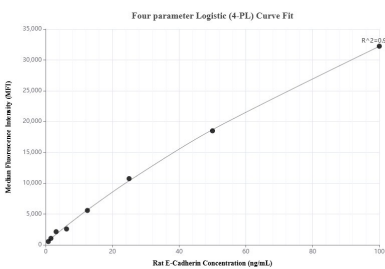
Urine of six rats was measured. The E-Cadherin concentration of detected samples was determined to be 5,367.9 ng/mL with a range of 1,627.0-10,091.3 ng/mL.



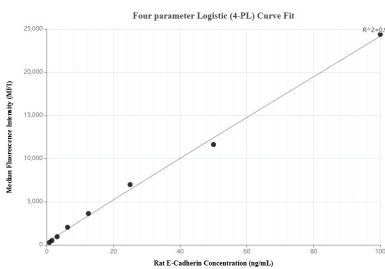
The mean E-Cadherin concentration was determined to be 33.3 ng/mL in rat spleen tissue extract based on a 2.7 mg/mL extract load.



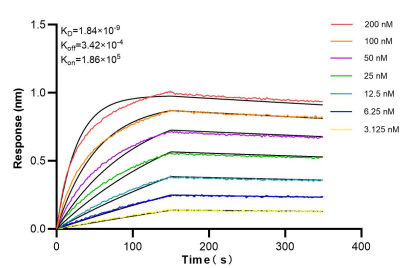
Serum of six rats was measured. The E-Cadherin concentration of detected samples was determined to be 673.3 ng/mL with a range of 608.2-748.3 ng/mL.



Cytometric bead array standard curve of MP01483-1, RAT E-Cadherin Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84646-1-PBS. Detection antibody: 84646-3-PBS. Standard: Eg1229. Range: 0.781-100 ng/mL.



Cytometric bead array standard curve of MP01483-2, RAT E-Cadherin Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84646-2-PBS. Detection antibody: 84646-3-PBS. Standard: Eg1229. Range: 0.781-100 ng/mL.



Biolayer interferometry (BLI) kinetic assays of 84646-3-RR against Rat E-Cadherin were performed. The affinity constant is 1.84 nM.