

For Research Use Only

# Alpha E-Catenin Polyclonal antibody



Catalog Number: 12831-1-AP **8 Publications**

## Basic Information

**Catalog Number:**

12831-1-AP

**Size:**

150UL, Concentration: 413 µg/ml by Bradford method using BSA as the standard;

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG3565

**GenBank Accession Number:**

BC031262

**GeneID (NCBI):**

1495

**Full Name:**

catenin (cadherin-associated protein), alpha 1, 102kDa

**Calculated MW:**

906 aa, 100 kDa

**Observed MW:**

100 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:1000-1:4000

IP 0.5-4.0 µg for IP and 1:500-1:1000

for WB

IHC 1:20-1:200

IF 1:10-1:100

## Applications

**Tested Applications:**

FC, IF, IHC, IP, WB, ELISA

**Cited Applications:**

IF, WB

**Species Specificity:**

human, mouse, rat

**Cited Species:**

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: mouse uterus tissue,

IP: mouse brain tissue,

IHC: human stomach tissue, human colon tissue, human pancreas cancer tissue

IF: A431 cells,

## Background Information

Alpha catenin is an essential component of adherens junctions that connects E-cadherin-β-catenin complexes with the actin cytoskeleton. It also recruits a range of other important proteins to developing intercellular junctions. Three alpha catenins exist in human: alpha-E-catenin, alpha-N-catenin, and alpha-T-catenin, which share substantial amino-acid sequence similarity but have distinct tissue distribution. alpha-E-catenin is ubiquitously expressed, alpha-N-catenin is restricted to neuronal tissue, and alpha-T-catenin is primarily expressed in heart tissue. Reduced levels of alpha-E-catenin protein seem to be characteristic of many different human cancers, including malignant tumours of the breast, colon, stomach, oesophagus, bladder and liver. In addition, the loss of alpha-E-catenin often correlates with the degree of tumour differentiation and metastasis.

## Notable Publications

Author	Pubmed ID	Journal	Application
Quan Zhou	31659258	Oncogene	WB
Yibin Zhou	30542490	Exp Ther Med	WB
Q Zhou	27694893	Oncogene	WB

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.1% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

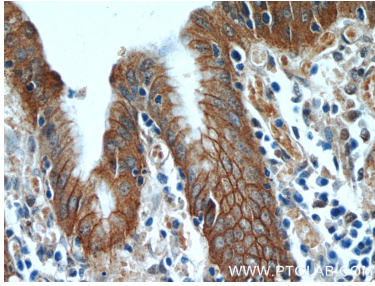
For technical support and original validation data for this product please contact:

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

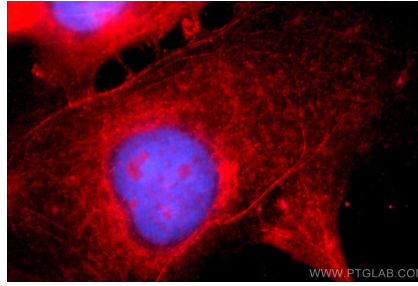
E: proteintech@ptglab.com  
W: ptglab.com

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

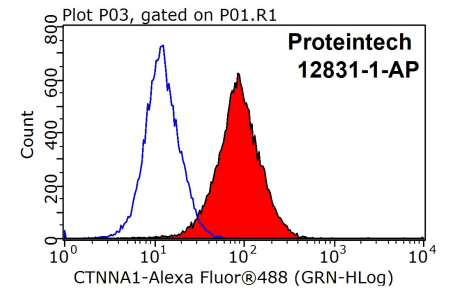
## Selected Validation Data



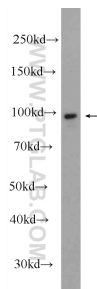
Immunohistochemical analysis of paraffin-embedded human stomach tissue slide using 12831-1-AP (Alpha E catenin antibody at dilution of 1:50 (under 40x lens).



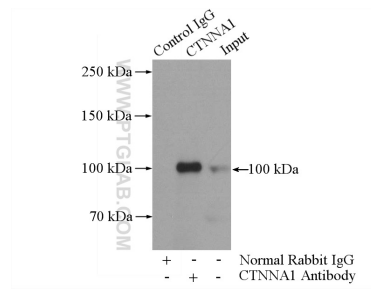
Immunofluorescent analysis of A431 cells using 12831-1-AP (Alpha E catenin antibody) at dilution of 1:25 and Rhodamine-Goat anti-Rabbit IgG.



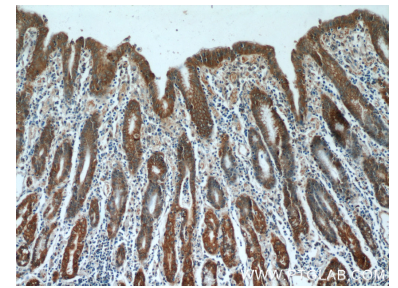
1X10<sup>6</sup> MCF-7 cells were stained with 0.2ug Alpha E catenin antibody (12831-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.



mouse uterus tissue were subjected to SDS PAGE followed by western blot with 12831-1-AP (Alpha E catenin antibody at dilution of 1:2000 incubated at room temperature for 1.5 hours.



IP Result of anti-Alpha E catenin (IP:12831-1-AP, 4ug; Detection:12831-1-AP 1:700) with mouse brain tissue lysate 4000ug.



Immunohistochemical analysis of paraffin-embedded human stomach tissue slide using 12831-1-AP (Alpha E catenin antibody at dilution of 1:50 (under 10x lens).