

For Research Use Only

# Alpha E-Catenin Polyclonal antibody

Catalog Number: 12831-1-AP **19 Publications**



## Basic Information

<b>Catalog Number:</b> 12831-1-AP	<b>GenBank Accession Number:</b> BC031262	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 700 ug/ml	<b>GeneID (NCBI):</b> 1495	<b>Recommended Dilutions:</b> WB 1:1000-1:4000
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P35221	IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
<b>Isotype:</b> IgG	<b>Full Name:</b> catenin (cadherin-associated protein), alpha 1, 102kDa	IHC 1:600-1:2400
<b>Immunogen Catalog Number:</b> AG3565	<b>Calculated MW:</b> 906 aa, 100 kDa	IF/ICC 1:10-1:100
	<b>Observed MW:</b> 100 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, IP, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> WB, IF	WB : mouse uterus tissue,
<b>Species Specificity:</b> human, mouse, rat	IP : mouse brain tissue,
<b>Cited Species:</b> human, mouse, rat	IHC : human colon tissue, human pancreas cancer tissue
	IF/ICC : A431 cells,

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

## Background Information

Alpha catenin is an essential component of adherens junctions that connects E-cadherin- $\beta$ -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
Xiaoli Ji	34650058	Cell Death Discov	WB
Yibin Zhou	30542490	Exp Ther Med	WB

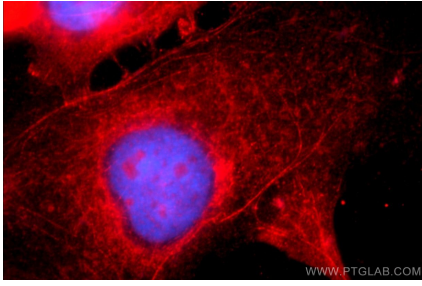
## Storage

**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

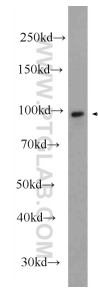
For technical support and original validation data for this product please contact:  
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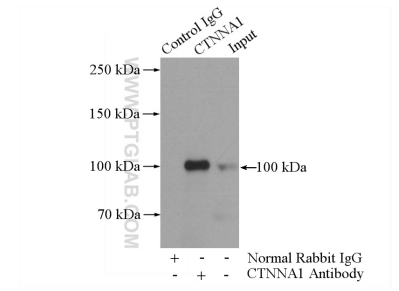
## Selected Validation Data



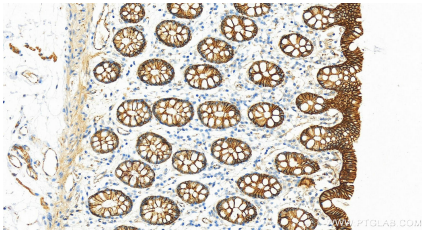
Immunofluorescent analysis of A431 cells using 12831-1-AP (Alpha E catenin antibody) at dilution of 1:25 and Rhodamine-Goat anti-Rabbit IgG.



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 normal colon slide using 12831-1-AP (Alpha E-Catenin antibody) at dilution of 1:1200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).