### For Research Use Only

# Alpha E-Catenin Polyclonal antibody

Catalog Number:12831-1-AP

20 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 12831-1-AP BC031262 GeneID (NCBI): Concentration: 700 ug/ml **UNIPROT ID:** Source: Rabbit P35221 Full Name: Isotype:

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

AG3565 Calculated MW: 906 aa. 100 kDa Observed MW:

100 kDa

**Applications** 

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

Immunogen Catalog Number:

**Cited Applications:** 

Species Specificity:

human, mouse, rat **Cited Species:** 

human, mouse, rat

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

buffer pH 6.0

**Purification Method:** Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:4000

IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:600-1:2400 IF/ICC 1:10-1:100

Positive Controls:

WB: mouse uterus tissue, IP: mouse brain tissue,

IHC: human colon tissue, human pancreas cancer

tissue

IF/ICC: A431 cells,

# **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

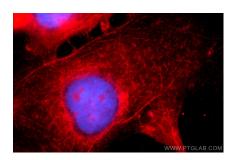
## Storage

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

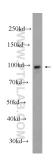
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

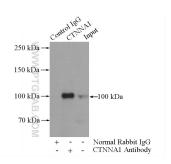
# **Selected Validation Data**



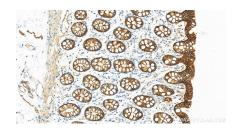
Immunofluorescent analysis of A431 cells using 12831-1-AP (Alpha E catenin antibody) at dilution of 1:25 and Rhodamine-Goat anti-Rabbit IgG.



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 paraffinembedded 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).