



**ABCLONAL BIOTECHNOLOGY, INC.**

## **$\alpha$ -E-Catenin Rabbit pab Antibody**

### **Anti $\alpha$ -E-Catenin antibody**

<b>Catalog Number:</b>	A0731	<b>Quantity:</b>	100ul
<b>Lot Number:</b>	A00009	<b>Species:</b>	Rabbit
<b>Gene ID:</b>	1495	<b>Swiss Prot:</b>	P35221

### **DESCRIPTION**

<b>Description</b>	Rabbit polyclonal to Human $\alpha$ -E-Catenin
<b>Species</b>	Rabbit
<b>Applications</b>	WB IHC ICC IP FC
<b>Reactivity</b>	H M R
<b>Immunogen</b>	A synthetic peptide of human $\alpha$ -E-Catenin
<b>Other Name</b>	CTNNA1; CAP102 ; FLJ36832 ;FLJ52416;Catenin alpha-1;Alpha E-catenin ;Cadherin-associated protein;Renal carcinoma antigen NY-REN-13 ;

### **PROPERTIES**

<b>Form</b>	Liquid
<b>Storage instructions</b>	Upon delivery aliquot and store at -20°C or -80°C.
<b>Storage buffer</b>	PBS with 0.1% Sodium Azide, 50% Glycerol,
<b>Purity</b>	Affinity purification
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

### **APPLICATION**

<b>WB</b>	WB :1/1000-2000
<b>IHC</b>	IHC:1/50-100
<b>ICC</b>	ICC:1/50-100
<b>IP</b>	IP:1/20-50
<b>FC</b>	FC:1/20-50



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### BACKGROUND

Adherens junctions are dynamic structures that form cell-cell contacts and are important in development, differentiation, tissue integrity, morphology and cell polarity. They are composed of the transmembrane proteins, cadherins, which bind cadherins on adjacent cells in a calcium-dependent manner. On the cytoplasmic side of adherens junctions, the classic model states that cadherins are linked to the cytoskeleton through  $\beta$ - and  $\alpha$ -catenin.  $\alpha$ -E-catenin is ubiquitously expressed,  $\alpha$ -N-catenin is expressed in neuronal tissue, and  $\alpha$ -T-catenin is primarily expressed in heart tissue. Loss of E-cadherin and  $\alpha$ -E-catenin occurs during the progression of several human cancers, indicating that the breakdown of adherens junctions is important in cancer progression (reviewed in 1). Recent evidence suggests that, rather than acting as a static link between cadherins and actin,  $\alpha$ -catenin regulates actin dynamics directly, possibly by competing with the actin nucleating arp2/3 complex (2,3).  $\alpha$ -catenin also plays a role in regulating  $\beta$ -catenin-dependent transcriptional activity, affecting differentiation and response to Wnt signaling.  $\alpha$ -catenin binds to  $\beta$ -catenin in the nucleus, preventing it from regulating transcription, and levels of both proteins appear to be regulated via proteasome-dependent degradation (4).

1. [Kobielak, A. and Fuchs, E. \(2004\) \*Nat. Rev. Mol. Cell Biol.\* 5, 614-625.](#)
2. [Yamada, S. et al. \(2005\) \*Cell\* 123, 889-901.](#)
3. [Drees, F. et al. \(2005\) \*Cell\* 123, 903-915.](#)
4. [Hwang, S.G. et al. \(2005\) \*J. Biol. Chem.\* 280, 12758-12765.](#)