ABCLONAL BIOTECHNOLOGY,INC.

α -E-Catenin Rabbit pab Antibody

Anti α -E-Catenin antibody

Catalog Number:	A0730	**Quantity:**	100ul
Lot Number:	A00009	**Species:**	Rabbit
Gene ID:	1495	**Swiss Prot:**	P35221

DESCRIPTION

Description Rabbit polyclonal to Human α -E-Catenin
Species Rabbit
Applications WB IHC
Reactivity H M R
Immunogen A fusion protein of human α -E-Catenin
Other Name CTNNA1;CAP102;FLJ36832;FLJ52416 ;

PROPERTIES

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

APPLICATION

WB WB :1/500-1000
IHC IHC:1/50-100

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 β- and α-catenin. α-E-catenin is ubiquitously expressed, α-N-catenin is expressed in neuronal tissue, and α-T-catenin is primarily expressed in heart tissue. Loss of E-cadherin and α-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, α-catenin regulates actin dynamics directly, possibly by competing with the actin nucleating arp2/3 complex (2,3). α-catenin also plays a role in regulating β-catenin-dependent transcriptional activity, affecting differentiation and response to Wnt signaling. α-catenin binds to β-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.