CELL APPLICATIONS, INC.

Alpha1-catenin Antibody

Cat. No. CG1654

Applications:	**WB, IHC**
Detected MW:	**100 kDa**
Species & Reactivity:	**Human, Mouse, Rat**
Isotype:	**Rabbit IgG**

BACKGROUND

Alpha-Catenin functions as a linking protein between cadherins and actin-containing filaments of the cytoskeleton. It has been reported that the actin binding proteins vinculin and alpha-actinin can bind to alpha-Catenin. However, a protein complex including a cadherin, actin, beta-Catenin and alpha-Catenin has not been isolated. It has been suggested that alpha-Catenin does not bind with high affinity to both actin filaments and the E-Cadherin-beta-Catenin complex at the same time1. It has been observed that when alpha-Catenin is not in a molecular complex with beta-Catenin, it dimerizes and functions to regulate actin filament assembly, possibly by competing with Arp2/3 protein[2]. The amino acid sequence of alpha-Catenin has sequence similarity to that of vinculin. There are three human alpha-Catenin genes: alpha-1-Catenin (also called alpha-E-Catenin), alpha-2-Catenin (also called alpha-N-Catenin), and alpha-3-Catenin (also called alpha-T-Catenin).

References:
1. Yamada, S. et al: Cell 123:889-901, 2005
2. Drees, S. et al: Cell 123:903-915, 2005

TECHNICAL INFORMATION

Source:
Alpha1-Catenin antibody is a rabbit antibody raised against a short peptide from N-terminal sequence of human alpha1-Catenin.

Specificity and Sensitivity:
This antibody detects endogenous alpha1-Catenin proteins without cross-reactivity with other family members.

Storage Buffer: Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

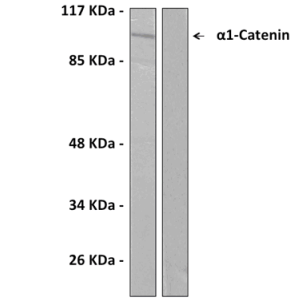
Storage:
Store at -20°C for at least one year. Store at 4°C for frequent use. Avoid repeated freeze-thaw cycles.

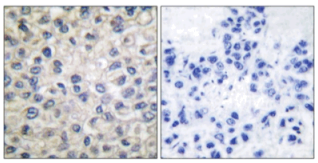
APPLICATIONS

Application:	*Dilution:
WB	1:500-1:1000
IP	n/d
IHC	1:50-1:100
ICC	n/d
FACS	n/d

**Optimal dilutions must be determined by end user.*

QUALITY CONTROL DATA





Top: Immunoblotting analysis of extracts from HeLa cells, using Anti-Catenin-α1, C-Terminal antibody. The lane on the left was treated with the Anti-Catenin-α1, C-Terminal antibody. The lane on the right (negative control) was treated with both Anti-Catenin-α1, C-Terminal antibody and the synthesized immunogen peptide.
Bottom: Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue using Anti-Catenin-α1, C-Terminal antibody. Cells on the left were treated with the Anti-Catenin-α1, C-Terminal antibody. Cells on the right (negative control) were treated with both Anti-Catenin-α1, C-Terminal antibody and the synthesized immunogen peptide.