Product datasheet for UM500014

beta Catenin (CTNNB1) Mouse Monoclonal Antibody [Clone ID: UMAB14]

Product data:

Product Type: Primary Antibodies
Clone Name: UMAB14
Applications: FC, IF, IHC, WB
Recommend Dilution: WB 1:500~2000, IHC 1:150, FLOW 1:100
Reactivity: Human, Monkey, Mouse, Rat, Dog
Host: Mouse
Isotype: IgG1
Clonality: Monoclonal
Immunogen: Full length human recombinant protein of human CTNNB1 (NP_001895) produced in HEK293T cell.
Formulation: PBS (PH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
Concentration: 0.5~1.0 mg/ml (Lot Dependent)
Purification: Purified from mouse ascites fluids by affinity chromatography
Predicted Protein Size: 85.3 kDa
Gene Name: Homo sapiens catenin beta 1 (CTNNB1), transcript variant 1, mRNA.
Database Link: NP_001895 Entrez Gene 12387 Mouse Entrez Gene 84353 Rat Entrez Gene 477032 Dog Entrez Gene 574265 Monkey Entrez Gene 1499 Human

Background:
The protein encoded by this gene is part of a complex of proteins that constitute adherens junctions (AJs). AJs are necessary for the creation and maintenance of epithelial cell layers by regulating cell growth and adhesion between cells. The encoded protein also anchors the actin cytoskeleton and may be responsible for transmitting the contact inhibition signal that causes cells to stop dividing once the epithelial sheet is complete. Finally, this protein binds to the product of the APC gene, which is mutated in adenomatous polyposis of the colon. Mutations in this gene are a cause of colorectal cancer (CRC), pilomatrixoma (PTR), medulloblastoma (MBD), and ovarian cancer. Three transcript variants encoding the same protein have been found for this gene.

Synonyms: armadillo; CTNNB; MRD19
Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Transcription Factors
Protein Pathways: Adherens junction, Arrhythmogenic right ventricular cardiomyopathy (ARVC), Basal cell carcinoma, Colorectal cancer, Endometrial cancer, Focal adhesion, Leukocyte transendothelial migration, Melanogenesis, Pathogenic Escherichia coli infection, Pathways in cancer, Prostate cancer, Thyroid cancer, Tight junction, Wnt signaling pathway

Product images:

OriGene overexpression protein microarray chip was immunostained with UltraMAB anti-beta-catenin mouse monoclonal antibody (Clone UMAB14). The positive reactive proteins are highlighted with two red arrows in the enlarged subarray. All the positive controls spotted in this subarray are also labeled for clarification. These data show that UltraMAB anti-beta-catenin (Clone UMAB14) very specifically recognizes beta-catenin antigen on OriGene protein microarray chip.

Flow cytometric Analysis of Hela cells, using anti-CTNNB1 antibody (UM500014), (Red), compared to a nonspecific negative control antibody, (Blue).
Immunohistochemical staining of paraffin-embedded human normal ovary and Adenocarcinoma of the ovary tissues using anti-beta-catenin mouse monoclonal antibody. (Clone UMAB14, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH 6.0, 120°C for 3 minutes.)

Immunohistochemical staining of paraffin-embedded human normal lung and lung Adenocarcinoma tissues using anti-beta-catenin mouse monoclonal antibody. (Clone UMAB14, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH 6.0, 120°C for 3 minutes.)

Western analysis of HEK 293T cells without treatment or treated with 30mM LiCl for 16 hours, using anti-beta-catenin antibody (clone UMAB14). Anti-HSP90 (TA500494) was used as internal loading control.
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-CTNNB1 monoclonal antibody (Clone UMAB14).

MDCK cells were treated either with 30mM NaCl as negative control (left) or with GSK-3beta kinase inhibitor 30mM LiCl (right) for 48 hrs. Anti-beta-catenin monoclonal antibody (clone UMAB14) was used for immunofluorescent staining.

HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CTNNB1 (RC208947, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CTNNB1 (1:500).
Western Blot analysis of 10 different human tissue lysates (10ug) by using Anti-β-Catenin monoclonal antibody (Clone UMAB14, 1:500)

Immunohistochemical staining of paraffin-embedded Mouse colon tissue using anti-beta-catenin mouse monoclonal antibody. (Clone UMAB14, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)