

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Product datasheet for UM570014

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

Product data:

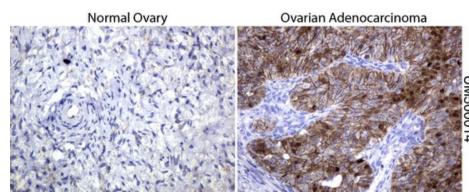
| Product Type: | Primary Antibodies |
|-------------------------|---|
| Clone Name: | UMAB14 |
| Applications: | 10k-ChIP, FC, IF, IHC, WB |
| Recommended Dilution: | WB 1:500~2000, IHC 1:150, FLOW 1:100 |
| Reactivity: | Human, Dog, Rat, Monkey, Mouse |
| Host: | Mouse |
| lsotype: | lgG1 |
| Clonality: | 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 or tissue culture supernatant by affinity chromatography (protein A/G) |
| Conjugation: | Unconjugated |
| Storage: | Store at -20°C as received. |
| Stability: | Stable for 12 months from date of receipt. |
| Predicted Protein Size: | 85.3 kDa |
| Gene Name: | catenin beta 1 |
| Database Link: | <u>NP 001895</u> Entrez Gene 12387 MouseEntrez Gene 84353 RatEntrez Gene 477032 DogEntrez Gene 574265 MonkeyEntrez Gene 1499 Human <u>P35222</u> |



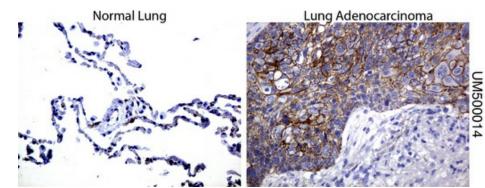
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| | beta Catenin (CTNNB1) Mouse Monoclonal Antibody [Clone ID: UMAB14] – UM570014 |
|-------------------|--|
| Background: | The protein encoded by this gene is part of a complex of proteins that constitute adherens junctions (AJs). AJs are necessary 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 (MDB), 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 Pathway | s: 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 |

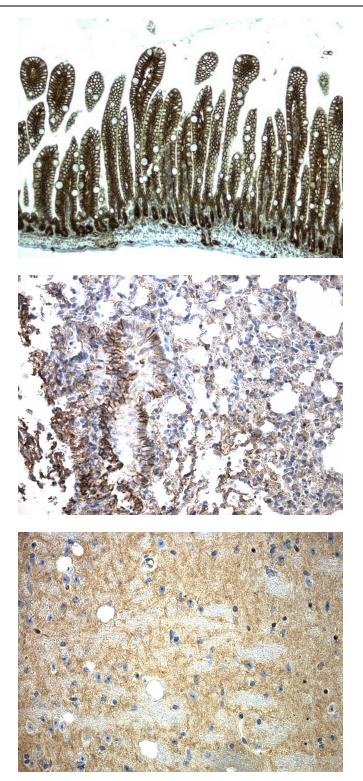
Product images:



Immunohistochemical staining of paraffinembedded human normal ovary and
Adenocarcinoma of the ovary tissues using
beta-catenin mouse monoclonal antibody.
UMAB14, dilution 1:100; heat-induced epitor
retrieval by 10mM citric buffer, pH6.0, 120 Adenocarcinoma of the ovary tissues using antibeta-catenin mouse monoclonal antibody. (Clone UMAB14, dilution 1:100; heat-induced epitope



Immunohistochemical staining of paraffinembedded 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, pH6.0, 120C for 3mi

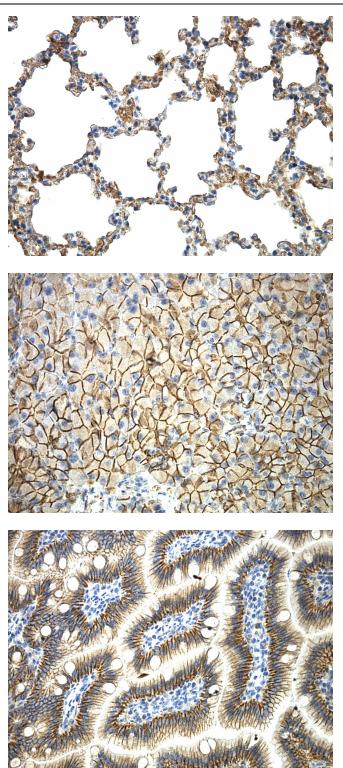
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Immunohistochemical staining of paraffinembedded Mouse colon tissue using anti-betacatenin mouse monoclonal antibody. (Clone UMAB14, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

Immunohistochemical staining of paraffinembedded mouse spleen tissue using anti-CTNNB1 clone UMAB14 mouse monoclonal antibody. HIER ACCEL buffer ([B22C-125]) (pH8.7) at 110C for 10 min, [UM500014] (1:100). Detection was done with Klear Mouse (C/N [D52-18]) DAB Kit.

Immunohistochemical staining of paraffinembedded mouse brain tissue using anti-CTNNB1 clone UMAB14 mouse monoclonal antibody. HIER TEE buffer pH9 ([B21-100]) at 110C for 10 min, [UM500014] (1:100). Detection was done with Klear Mouse (C/N [D52-18]) DAB Kit.

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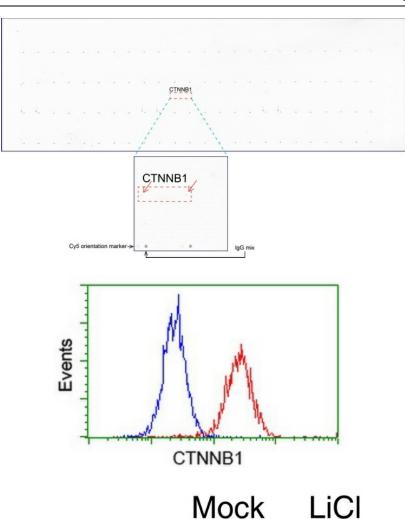
Immunohistochemical staining of paraffinembedded mouse lung tissue using anti-CTNNB1 clone UMAB14 mouse monoclonal antibody. HIER TEE buffer pH9 ([B21-100]) at 110C for 10 min, [UM500014] (1:100). Detection was done with Klear Mouse (C/N [D52-18]) DAB Kit.

Immunohistochemical staining of paraffinembedded mouse kidney tissue using anti-CTNNB1 clone UMAB14 mouse monoclonal antibody. HIER TEE buffer pH9 ([B21-100]) at 110C for 10 min, [UM500014] (1:100). Detection was done with Klear Mouse (C/N [D52-18]) DAB Kit.

Immunohistochemical staining of paraffinembedded mouse small intestine tissue using anti-CTNNB1 clone UMAB14 mouse monoclonal antibody. HIER TEE buffer pH9 ([B21-100]) at 110C for 10 min, [UM500014] (1:100). Detection was done with Klear Mouse (C/N [D52-18]) DAB Kit.

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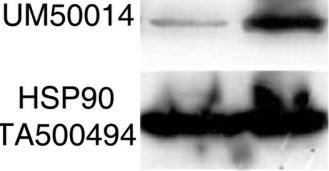


OriGene overexpression protein microarray chip was immunostained with UltraMAB anti-betacatenin mouse monoclonal antibody (Clone UMAB14). The positive reactive proteins are highlighted with two red arrows in the enlarged subarray. All the positive controls spotted in this subarray are also labeled for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

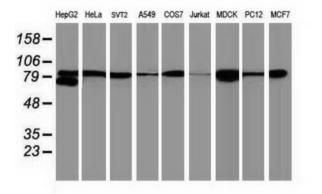
Flow cytometric Analysis of Hela cells, using anti-CTNNB1 antibody ([UM500014]), (Red), compared to a nonspecific negative control antibody, (Blue).

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.

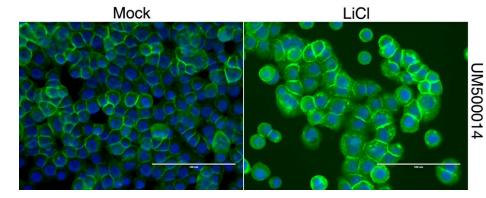
HSP90 TA500494



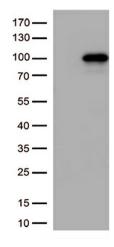
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Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-CTNNB1 monoclonal antibody (Clone UMAB14).



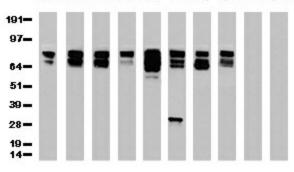
MDCK cells were treated either with 30mM NaCl as negative control (left) or with GSK-3beta kinase inhibor 30mM LiCl (right) for 48 hrs. Anti-betacatenin monoclonal antibody (clone UMAB14) was used for immunofluorescent staining.



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).

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Testis Omentum Uterus Breast Brain Liver Ovary Thyroid Colon Spleen



Western Blot analysis of 10 different human tissue lysates (10ug) by using Anti-β-Catenin monoclonal antibody (Clone UMAB14, 1:500)

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