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# Product datasheet for SC107921

## beta Catenin (CTNNB1) (NM_001904) Human Untagged Clone

### Product data:

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|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | beta Catenin (CTNNB1) (NM_001904) Human Untagged Clone |
| **Tag:** | Tag Free |
| **Symbol:** | beta Catenin |
| **Synonyms:** | armadillo; CTNNB; EVR7; MRD19; NEDSDV |
| **Mammalian Cell Selection:** | None |
| **Vector:** | pCMV6-XL5 |
| **E. coli Selection:** | Ampicillin (100 ug/mL) |
| **Fully Sequenced ORF:** | >NCBI ORF sequence for NM_001904, the custom clone sequence may differ by one or more nucleotides |

CGGATTATGAAACCGCACTTACTATAGGGCGGCCGCGCAATTCGCACGAGGCCTCGTGCCGAATTCGGCA
CGAGGCGGGAGCGGAGAGCGAGGGGAGGCGGAGACGGAGGAAGGTCTGAGGAGCAGCTTCAGTCCCCGCC
GAGCCGCCACCGCAGGTCGAGGACGGTCGGACTCCCGCGGCGGGAGGAGCCTGTTCCCCTGAGGGTATTT
TTTTTATACCATACAACTGTTTTGAAAATCCAGCGTGGACAATGGCTACTCAAGCTGATTTGATGGAGTT
GGACATGGCCATGGAACCAGACAGAAAAGCGGCTGTTAGTCACTGGCAGCAACAGTCTTACCTGGACTCT
GGAATCCATTCTGGTGCCACTACCACAGCTCCTTCTCTGAGTGGTAAAGGCAATCCTGAGGAAGAGGATG
TGGATACCTCCCAAGTCCTGTATGAGTGGGAACAGGGATTTTCTCAGTCCTTCACTCAAGAACAAGTAGC
TGATATTGATGGACAGTATGCAATGACTCGAGCTCAGAGGGTACGAGCTGCTATGTTCCCTGAGACATTA
GATGAGGGCATGCAGATCCCATCTACACAGTTTGATGCTGCTCATCCCACTAATGTCCAGCGTTTGGCTG
AACCATCACAGATGCTGAAACATGCAGTTGTAAACTTGATTAACTATCAAGATGATGCAGAACTTGCCAC
ACGTGCAATCCCTGAACTGACAAAACTGCTAAATGACGAGGACCAGGTGGTGGTTAATAAGGCTGCAGTT
ATGGTCCATCAGCTTTCTAAAAGGAAGCTTCCAGACACGCTATCATGCGTNCTCCTCAGATGGTGTCTGC
TATTGTACGTACCATGCCAGATACAAATGATGTAGAAACAGCTCGTTGTACCCGCTGGGACCTTGCATNA
CCTTNTCCCANCATGCGTGAGGGCTTACTGGNCCATTTTTAANTCTGGAAGCATTCCTGCCCTTTGTTGA
AATGCTG

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|---|---|
| **Restriction Sites:** | NotI-NotI |
| **ACCN:** | NM_001904 |
| **Insert Size:** | 4000 bp |

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|---|---|
| **OTI Disclaimer:** | Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.<br><br>The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info |
| **Components:** | The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water). |
| **Reconstitution Method:** | 1. Centrifuge at 5,000xg for 5min.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C. |
| **RefSeq:** | NM_001904.2, NP_001895.1 |
| **RefSeq Size:** | 3720 bp |
| **RefSeq ORF:** | 987 bp |
| **Locus ID:** | 1499 |
| **UniProt ID:** | P35222 |
| **Cytogenetics:** | 3p22.1 |
| **Domains:** | Armadillo_seg |
| **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 |

**Gene Summary:**

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. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2016]
Transcript Variant: This variant (1) represents the longest transcript. Variants 1, 2 and 3 encode the same isoform (1).