

Product datasheet for RC400201

OriGene Technologies, Inc.

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beta Catenin (CTNNB1) (NM_001904) Human Mutant ORF Clone

Product data:

Product Type: Mutant ORF Clones

Product Name: beta Catenin (CTNNB1) (NM_001904) Human Mutant ORF Clone

Mutation Description: S45
Affected Codon#: 45

Affected NT#: c.134

Nucleotide Mutation: CTNNB1 Mutant (S45Y), Myc-DDK-tagged ORF clone of Homo sapiens catenin (cadherin-

associated protein), beta 1, 88kDa (CTNNB1), transcript variant 1 as transfection-ready DNA

Effect: Missense

Symbol: beta Catenin

Synonyms: armadillo; CTNNB; EVR7; MRD19; NEDSDV

E. coli Selection: Kanamycin (25 ug/mL)

Mammalian Cell Neo

Selection:

Neomycin

Vector: pCMV6-Entry (PS100001)

 Tag:
 Myc-DDK

 ACCN:
 NM_001904

ORF Size: 2343 bp
Restriction Sites: Sgfl-Mlul

Chromatograms: /chromatograms/ja2436_c06.zip

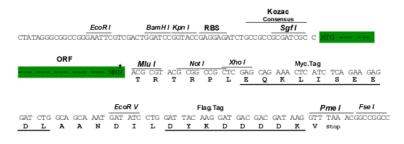
Restriction Sites: Sgfl-Mlul





Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

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 customproteo and delivery.

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

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

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).

RefSeq: <u>NP 001895</u>

RefSeq Size: 3720 bp



beta Catenin (CTNNB1) (NM_001904) Human Mutant ORF Clone - RC400201

RefSeq ORF: 2346 bp Locus ID: 1499 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

MW: 85 kDa

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]