

## Product datasheet for **TP308947L**

### beta Catenin (CTNNB1) (NM\_001904) Human Recombinant Protein

#### Product data:

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human catenin (cadherin-associated protein), beta 1, 88kDa (CTNNB1), 1 mg

**Species:** Human

**Expression Host:** HEK293T

**Expression cDNA** >RC208947 representing NM\_001904

**Clone or AA** **Red**=Cloning site **Green**=Tags(s)

**Sequence:**

MATQADLMELDMAMEPDRKAAVSHWQQQSYLDSGIHSGATTTAPSLSGKGNPEEEDVDTSQVLYEWEQGF  
SQSFTQEQVADIDGQYAMTRAQRVRAAMFPETLDEGMQIPSTQFDDAAHPTNVQRLAEPSQMLKHAVNLI  
NYQDDAELATRAIPELTKLLNDEDQVVVNKAAVMVHQLSKKEASRHAIMRSPQMVSIAIVRTMQNTNDVET  
ARCTAGTLHNLSHHREGLLAIFKSGGIPALVKMLGSPVDSVLFYAITTLHNLHLLHQEGAKMAVRLAGGLQ  
KMVALLNKTNVKFLAITTDCLQILAYGNQESKLIILASGGPQALVNIMRTYTYEKLLWTTSRVLKVLVSV  
SSNKPAIVEAGGMQALGLHLTDPSQRLVQNCLWTLRNLSDAATKQEGMEGLLGLTLVQLLGSDDINVTCA  
AGILSNLTCNNYKNKMMVCQVGGIEALVRTVLRAGDREDITEPAICALRHLTSRHQEAEMAQNAVRLHYG  
LPVVVKLLHPPSHWPLIKATVGLIRNLALCPANHAPLREQGAIPRLVQLLVRAHQDTQRRRTSMGGTQQQF  
VEGVRMEEIVEGCTGALHILARDVHNRIVIRGLNTIPLFVQLLYSPIENIQRVAAGVLCELAQDKEAAEA  
IEAEGATAPLTELHNRNEGVATYAAAVLFRMSKDPQDYKKRSLVELTSSLFRTEPMAWNETADLGLDI  
GAQGEPLGYRQDDPSYRSFHSGGYGQDALGMDPMMHEMGGHHPGADYPVDGLPDLGHAQDLMDGLPPGD  
SNQLAWFDL

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Tag:** C-Myc/DDK

**Predicted MW:** 85.3 kDa

**Concentration:** >0.1 µg/µL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

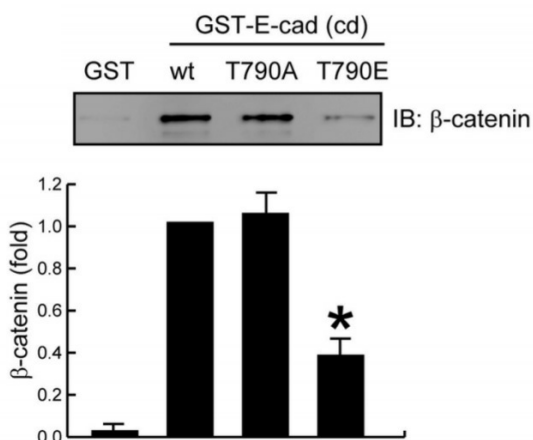
**Bioactivity:** Pull-down assay (PMID: [27203386](https://pubmed.ncbi.nlm.nih.gov/27203386/))

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.

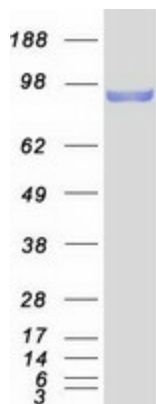


[View online »](#)

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Note:</b>             | For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Storage:</b>          | Store at -80°C.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Stability:</b>        | Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>RefSeq:</b>           | <a href="#">NP_001895</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Locus ID:</b>         | 1499                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>UniProt ID:</b>       | <a href="#">P35222</a> , <a href="#">A0A024R2Q3</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>RefSeq Size:</b>      | 3697                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Cytogenetics:</b>     | 3p22.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>RefSeq ORF:</b>       | 2343                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Synonyms:</b>         | armadillo; CTNNB; EVR7; MRD19; NEDSDV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Summary:</b>          | 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), pilomatixoma (PTR), medulloblastoma (MDB), and ovarian cancer. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2016] |
| <b>Protein Families:</b> | Druggable Genome, ES Cell Differentiation/IPS, Transcription Factors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Protein Pathways:</b> | 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:**


Substitution of E-cadherin Thr790 with Glu reduces the binding between E-cadherin and beta-catenin. Purified beta-catenin (OriGene [TP308947]) was incubated with purified wild-type (wt) or mutant (T790A or T790E) GST-E-cadherin-cytoplasmic domains (cd) or GST (as a control). The protein complexes were pulled-down by glutathione-agarose beads and analyzed by immunoblotting with an anti-beta-catenin antibody. The level of bound beta-catenin was quantified and expressed as the fold relative to the level in the GST-E-cadherin-cd wt. \* P < 0.05. Figure cited from Oncotarget, PMID: 27203386



Coomassie blue staining of purified CTNNB1 protein (Cat# [TP308947]). The protein was produced from HEK293T cells transfected with CTNNB1 cDNA clone (Cat# [RC208947]) using MegaTran 2.0 (Cat# [TT210002]).