

Product datasheet for **MR227484**

Ctnnb1 (NM_001165902) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ctnnb1 (NM_001165902) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ctnnb1
Synonyms:	Bfc; Cat; Catnb; Mesc
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MR227484 representing NM_001165902
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTACTCAAGCTGACCTGATGGAGTTGGACATGGCCATGGAGCCGGACAGAAAAGCTGCTGTACGCC
 ACTGGCAGCAGCAGTCTTACTTGGATTCTGGAATCCATTCTGGTGCCACCACCACAGCTCCTTCCCTGAG
 TGGCAAGGGCAACCCTGAGGAAGAAGATGTTGACACCTCCAAGTCCTTTATGAATGGGAGCAAGGCTTT
 TCCAGTCCTTACGCAAGAGCAAGTAGCTGATATTGACGGGCAGTATGCAATGACTAGGGCTCAGAGGG
 TCCGAGCTGCCATGTTCCCTGAGACGCTAGATGAGGGCATGCAGATCCCATCCACGCAGTTTGACGCTGC
 TCATCCCCTAATGTCCAGCGCTTGGCTGAACCATCACAGATGTTGAAACATGCAGTTGTCAATTTGATT
 AACTATCAGGATGACGCGGAACCTGCCACACGTGCAATTCCTGAGCTGACAAAACCTGCTAAACGATGAGG
 ACCAGGTGGTAGTTAATAAAGCTGCTGTTATGGTCCATCAGCTTCCAAAAAGGAAGCTTCCAGACATGC
 CATCATGCGCTCCCTCAGATGGTGTCTGCCATTGTACGCACCATGCAGAATACAATGATGTAGAGACA
 GCTCGTTGTAAGTCTGGGACTCTGCACAACCTTCTCACCACCGGAGGGCTTGCTGGCCATCTTTAAGT
 CTGGTGGCATCCCAGCGCTGGTGAATGCTTGGGTCAACAGTGGATTCTGTACTGTTTACGCCATCAC
 GACTGACATAATCTCCTGCTCCATCAGGAAGGAGCTAAAATGGCAGTGCCTAGCTGGTGGACTGCAG
 AAAATGGTTGCTTGGCTCAACAAAAACAACGTGAAATCTTGGCTATTACAACAGACTGCCTCAGATCT
 TAGCTTATGGCAATCAAGAGAGCAAGCTCATATTCTGGCCAGTGGTGGACCCCAAGCCTTAGTAAACAT
 AATGAGGACCTACACTTATGAGAAGCTTCTGTGGACCACAAGCAGAGTGTGAAGGTGCTGTCTGTCTGC
 TCTAGCAACAAGCCGGCATTGTAGAAGCTGGTGGATGCAGGCACTGGGCTTCATCTGACAGACCCAA
 GTCAGCGACTTGTCAAACCTGCTTTGGACTCTCAGAAACCTTTCAGATGCAGCGACTAAGCAGGAAGG
 GATGGAAGGCCTCCTTGGGACTCTAGTGCAGCTTCTGGGTTCCGATGATATAAATGTGGTACCTGTGCA
 GCTGGAATTCTCTCTAACCTCACTTGAATAATTACAAAAACAAGATGATGGTGTGCCAAGTGGGTGGCA
 TAGAGGCTCTTGTACGCACCGCTCTTCTGTGGTGCAGGGAAGACATCACTGAGCCTGCCATCTGTGC
 TCTTCTGTCATCTGACCAGCCGGCATCAGGAAGCCGAGATGGCCAGAATGCCGTTGCGCTTCATTATGGA
 CTGCTGTGTGGTTAACTCCTGCACCCACCATCCCCTGGCCTCTGATAAAGGCAACTGTTGGATTGA
 TTCGAAACCTTGGCCTTGGCCAGCAAATCATGCGCTTTCGGGAACAGGGTGTATTCCACGACTAGT
 TCAGCTGCTTGTACGAGCACATCAGGACACCCACGGCGCACCTCCATGGGTGGAACGCAGCAGCAGTTT
 GTGGAGGGCGTGCATGGAGGAGATAGTAGAAGGTGTACTGGAGCTCTCCACATCCTTGTCTGGGACG
 TTCACAACCGGATTGTAATCCGAGGACTCAATACCATTCCATTGTTTGTGCAATTGCTTTATTCTCCCAT
 TGAAAATATCAAAGAGTAGCTGCAGGGTCTCTGTGAACCTGCTCAGGACAAGGAGGCTGCAGAGGCC
 ATTGAAGCTGAGGGAGCCACAGCTCCCCTGACAGAGTACTCCACTCCAGGAATGAAGGCGTGGCAACAT
 ACGCAGCTGCTGTCTATTCCGAATGTCTGAGGACAAGCCACAGGATTACAAGAAGCGGCTTTCAGTCGA
 GCTGACCAGTTCCTCTCAGGACAGAGCCAATGGCTTGGAAATGAGACTGCAGATCTTGGACTGGACATT
 GGTGCCCAGGGAGAAGCCCTTGGATATCGCCAGGATGATCCCAGCTACCGTTCTTTTCACTCTGGTGGAT
 ACGGCCAGGATGCCTTGGGATGGACCTATGATGGAGCATGAGATGGGTGGCCACCACCCTGGTGTGA
 CTATCCAGTTGATGGGCTGCCTGATCTGGGACACGCCAGGACCTCATGGATGGGCTGCCCCAGGTGAT
 AGCAATCAGCTGGCCTGGTTTGATACTGACCTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR227484 representing NM_001165902
Red=Cloning site Green=Tags(s)

MATQADLMELDMAMEPDRKAAVSHWQQSYLDSGIHSGATTTAPSLSGKGNPEEEDVDTSQVLYEWEQGF
SQSFTQEQVADIDGQYAMTRAQRVRAAMFPETLDEGMQIPSTQFDDAAHPTNVQRLAEPQMLKHAVVNI
NYQDDAELATRAIPELTKLLNDEDQVVVNKAAMVHQLSKKEASRHAIMRSPQMVSIVRTMONTNDVET
ARCTAGTLHNLSSHREGLLAIIFKSGGIPALVKMLGSPVDSVLFYAITTLHNLHLLHQEGAKMAVRLAGGLQ
KMVALLNKTNVKFLAITTDCLQILAYGNQESKLIILASGGPQALVNIMRTYTYEKLLWTTSRVLKVL SVC
SSNKPAIVEAGGMQALGLHLTDPQRLVQNCLWTLRNLSDAATKQEGMEGLLGTLVQLLGSDDINVTCA
AGILSNLTCNNYKNMMVCQVGGIEALVRTVLRAGDREDITEPAICALRHLLSRHQEAEMAQNAVRLHYG
LPVVVLLHPPSHWPLIKATVGLIRNLALCPANHAPLREQGAI PRLVQLLVRAHQDTQRRTSMGGTQQQF
VEGVRMEEIVEGCTGALHILARDVHNRI VIRGLNTIPLFVQLLYSPIENIQRVAAGVLCELAQDKEAAEA
IEAEGATAPL TELLHSRNEGVATYAAAVLFRMSEDKPQDYKKRLSVELTSSLFRTEPMAWNETADLGLDI
GAQGEALGYRQDDPSYRSFHSGGYGQDALGMDPMMEHEMGGHHPGADYPVDGLPDLGHAQDLMDGLPPGD
SNQLAWFDTDL

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-Mlul

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
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_001165902.1](#), [NP_001159374.1](#)

RefSeq Size: 3440 bp

RefSeq ORF: 2346 bp

Locus ID: 12387

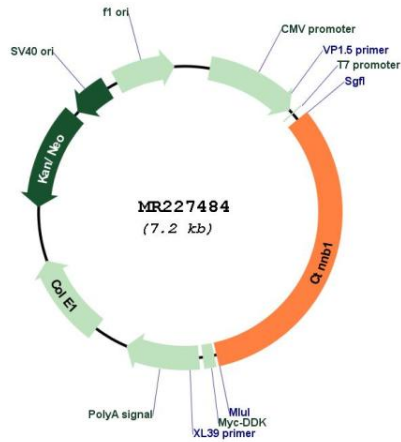
UniProt ID: [Q02248](#)

Cytogenetics: 9 72.19 cM

MW: 85.5 kDa

Gene Summary: This gene encodes not only an important cytoplasmic component of the classical cadherin adhesion complex that forms the adherens junction in epithelia and mediates cell-cell adhesion in many other tissues but also a key signaling molecule in the canonical Wnt signaling pathway that controls cell growth and differentiation during both normal development and tumorigenesis. The gene product contains a central armadillo-repeat containing domain through which it binds the cytoplasmic tail of classical cadherins; meanwhile, it also binds alpha-catenin, which further links the cadherin complex to the actin cytoskeleton either directly or indirectly. Beta-catenin is therefore necessary for the adhesive function of classical cadherins. Another key function of this protein is to mediate the canonical Wnt signaling pathway and regulate gene transcription. Without Wnt signal, cytoplasmic beta-catenin that is not associated with the cadherin complex is quickly phosphorylated at the N-terminal Ser/Thr residues by the so called degradation complex containing axin, adenomatous polyposis coli (APC), casein kinase I, and GSK3B, then ubiquitinated by beta-TrCP, and degraded by the proteasome. However, in the presence of Wnt signal, the degradation complex is disrupted and the stabilized cytoplasmic beta-catenin translocates into the nucleus, where it binds various transcription factors and, together with these factors, regulates the transcription of many downstream genes. Mutations of this gene have been linked with various types of tumors. Alternatively spliced variants have been found for this gene. [provided by RefSeq, Sep 2009]

Product images:



Circular map for MR227484