

Product datasheet for **RG219207**

gamma Catenin (JUP) (NM_021991) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	gamma Catenin (JUP) (NM_021991) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	JUP
Synonyms:	CTNNG; DP3; DPIII; PDGB; PG; PKGB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG219207 representing NM_021991
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGGTGATGAACCTGATGGAGCAGCCTATCAAGGTGACTGAGTGGCAGCAGACATACACCTACGACT
 CGGGTATCCACTCGGGCGCCAACACCTGCGTGCCCTCCGTCAGCAGCAAGGGCATCATGGAGGAGGATGA
 GGCTGCGGGCGCCAGTACACGCTCAAGAAAACCACTTACACCCAGGGGGTGCCCCCAGCCAAAGT
 GACCTGGAGTACCAGATGTCCACAACAGCCAGGGCCAACGGGTGCGGGAGGCCATGTGCCCTGGTGTGT
 CAGGCGAGGACAGCTCGCTTCTGCTGGCCACCCAGGTGGAGGGGCAGGCCACCACTGCAGCGACTGGC
 CGAGCCGTCCCAGCTGCTCAAGTCGGCCATTGTGCATCTCATCACTACCAGGACGATGCCGAGCTGGCC
 ACTCGCGCCCTGCCGAGCTCACAACTGCTCAACGACGAGGACCCGGTGGTGGTACCAAGGCGGCCA
 TGATTGTGAACCAGCTGTGAAGAAGGAGGCGTCGCGGGGGCCCTGATGGGCTCGCCCCAGCTGGTGGC
 CGCTGTCTGCGTACCATGCAGAATACCAGCGACTGGACACAGCCCGCTGCACCACCAGCATCCTGCAC
 AACCTCTCCACACCGGGAGGGGCTGCTCGCCATCTTCAAGTCGGGTGGCATCCCTGCTCTGGTCCGCA
 TGCTCAGCTCCCCTGTGGAGTCGGTCTGTTCTATGCCATCACCACGCTGCACAACCTGCTCCTGTACCA
 GGAGGGCGCCAAGATGGCCGTGCGCCTGGCCGACGGGTGCAAAAAGATGGTGGCCCTGCTCAACAAGAAC
 AACCCCAAGTTCCTGGCCATCACACCGACTGCCTGCAGCTCCTGGCCTACGGCAACCAGGAGAGCAAGC
 TGATCATCCTGGCCAATGGTGGGCCCCAGGCCCTCGTGCAGATCATGCGTAACTACAGTTATGAAAAGCT
 GCTCTGGACCACAGTCGTGTGCTCAAGGTGCTATCCGTGTGCCAGCAATAAGCCTGCCATTGTGGAG
 GCTGGTGGGATGCAGGCCCTGGCAAGCACCTGACCAGCAACAGCCCCCGCTGGTGCAGAACTGCCTGT
 GGACCTGCGCAACCTCTCAGATGTGGCCACCAAGCAGGAGGGCCTGGAGAGTGTGCTGAAGATTCTGGT
 GAATCAGCTGAGTGTGGATGACGTCAACGTCCTCACCTGTGCCACGGGCACACTCTCAACCTGACATGC
 AACAAACAGCAAGAACAAGACGCTGGTGACACAGAACAGCGGTGTGGAGGCTCTCATCCATGCCATCCTGC
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 CAGCCCAACCAGTGGCCACTGGTCAAGGCAACCATCGGCTTGATCAGGAATCTGGCCCTGTGCCAGCCA
 ACCATGCCCGCTGCAGGAGGCAGCGGTATCCCCCGCTCGTCCAATGCTGGTGAAGGCCACCAGGA
 TGCCAGCGCCACGTAGCTGCAGGCACACAGCAGCCCTACACGGATGGTGTGAGGATGGAGGAGATTGTG
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 ACACCATCCCCTGTTTGTGCAGCTCCTGTACTCGTGGTGGAGAACATCCAGCGCGTGGCTGCCGGGGT
 GCTGTGTGAGCTGGCCCAGGACAAGGAGGCGGCCAGCCATTGATGCAGAGGGGGCCTCGGCCCACTC
 ATGGAGTTGCTGCACTCCCGCAACGAGGGCACTGCCACCTACGCTGCTGCCGTCTGTTCCGCATCTCCG
 AGGACAAGAACCAGACTACCGAAGCGCGTGTCCGTGGAGCTCACCAACTCCCTCTTCAAGCATGACCC
 GGCTGCCCTGGGAGGCTGCCAGAGCATGATTCCCATCAATGAGCCCTATGGAGATGACATGGATGCCACC
 TACCGCCCATGTACTCCAGCGATGTGCCCTTGACCCGCTGGAGATGCACATGGACATGGATGGAGACT
 ACCCATCGACACCTACAGCGACGGCCTCAGGCCCCCGTACCCCACTGCAGACCACATGCTGGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG219207 representing NM_021991
 Red=Cloning site Green=Tags(s)

MEVMNLMEQPIKVTWEQQTYTYDSGIHSANTCVPSVSSKIGIMEEDEACGRQYTLKKTTTYTQGVPPSQG
 DLEYQMSTTARAKRVREAMCPGVSGEDSSLLLATQVEGQATNLQRLAEPSSLKSAIVHLINYQDDAELA
 TRALPELTKLLNDEDPVVVTKAAMIVNQLSKKEASRRALMGSPQLVAAVVRTMQNTSDLTARCTTSILH
 NLSHHREGLLAIFKSGGIPALVRMLSSPVESVLFYAITTLHNLLLYQEGAKMAVRLADGLQKMVPLLKN
 NPKFLAITDCLQLLAYGNQESKLIILANGGPQALVQIMRNYSYEKLLWTTSRVLKVLVSVCPNKP
 AIVEAGGMQALGKHLTSNSPRLVQNCWTLRNLSDVATKQEGLESVLKILVNQLSVDDVNVLT
 CATGTLSNLTCNNSKNKTLVTQNSGVEALIHAILRAGDKDDITEPAVCALRHLTSRHP
 EAEMAQNSVRLNYGIPAIVKLLNQPNQWPLVKATIGLIRNLALCPANHAPLQEA
 AVIPRLVQLLVKAHQDAQRHVAAGTQQPYTDGVRMEEIVEGCTGALHILARDP
 MNRMEIFRLNTIPLFVQLLYSSVENIQRVAAGVLC
 ELAQDKEAADAIDAEGASAPLMELLHSRNEGATYAAAVLFRISEDKNPDYRKRVS
 VELTNSLFKHDPAAWEEAAQSMIPINEPYGDDMDATYRPMYSSDVPLDPLEMHMDMDG
 DYPIDTYS DGLRPPYPTADHMLA

TRTRPLE - GFP Tag - V

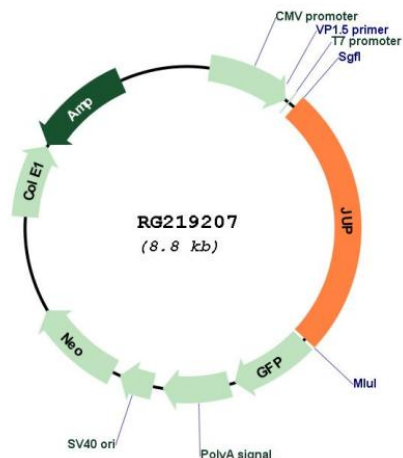
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_021991

ORF Size: 2235 bp

OTI Disclaimer: 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).

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_021991.1](#), [NP_068831.1](#)

RefSeq Size: 3192 bp

RefSeq ORF: 2238 bp

Locus ID: 3728

UniProt ID:	P14923
Cytogenetics:	17q21.2
Domains:	Armadillo_seg
Protein Families:	Druggable Genome
Protein Pathways:	Acute myeloid leukemia, Arrhythmogenic right ventricular cardiomyopathy (ARVC), Pathways in cancer

Gene Summary: This gene encodes a major cytoplasmic protein which is the only known constituent common to submembranous plaques of both desmosomes and intermediate junctions. This protein forms distinct complexes with cadherins and desmosomal cadherins and is a member of the catenin family since it contains a distinct repeating amino acid motif called the armadillo repeat. Mutation in this gene has been associated with Naxos disease. Alternative splicing occurs in this gene; however, not all transcripts have been fully described. [provided by RefSeq, Jul 2008]