

Product datasheet for **RC222084**

PCDHGB7 (NM_032101) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PCDHGB7 (NM_032101) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PCDHGB7
Synonyms:	ME6; PCDH-GAMMA-B7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RC222084 representing NM_032101
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGAGGGAGCTGCGCGCAGAGCGCCGGGCCGGCCGCGGCAGGTAATTTCTTTGCTGCTGCCTT
 TGGTCTACCCACGCTGTGTGAGCCGATCCGCTACTCGATTCCGGAGGAGCTGGCCAAGGGCTCGGTGGT
 GGGAACTCGCTAAGGATCTAGGGCTTAGTGCTGGATGTGTCGGCTCGCGAGCTGCGAGTGAGCGCG
 GAGAAGCTGCACTTCAGCGTAGACGCGCAGAGCGGGGACTTACTTGTGAAGGACCGAATAGACCGTGAGC
 AAATATGCAAAGAGAGAAGAAGATGTGAGTTGCAATTGGAAGCTGTGGTGGAAAACTTTAAATATTTT
 TCATGTCATTGTGGTATTGAGGATGTTAATGACCAGCCCTCAATCCGGAAAGATGAAATAAATTA
 GAAATCAGTGAATCCGTCAGCCTGGGGATGGGAACAATCTTGAGTCTGCAGAAGATCTGATATTAGTA
 TGAATTCGCTGAGCAAATACCACTAAGTCTAACGAGTATTTCTCATTGGTGGAGAAAGACAATCTGA
 TGGTGGCAAATATCCAGAATTAGTATTGAGAAGACTCTGGACCGAGAAACGCAGAGCGCTCACCCTTG
 GACTGACCGCCTTAGATGGTGGGGACCTCCCGAAGCGGTAAGTCTCAGATAAGAATCCCTGGTAAATAG
 ATGCCAATGACAACCCCAAGTGTTCAGCCAGGACGTGTACAGGGTTAGCCTTCGGGAAGACGTGCCTCC
 AGGCACCTCCATCCTGAGAGTGAAGGCCACTGACCAGGACGAGGGCATCAACTCAGAGATCACTTATTCC
 TTCTTTGGTGTGGCTGACAAAGCTCAGCACGTGTTCTCTCTGGATTACACTACAGGAAACATTCTAACTC
 AGCAGCCTTTGGATTTTGAAGAAGTAGAAAAGATATACGATAAACATAGAAGCAAAAGACCGAGGATCTCT
 CTCAACACGGTGTAAAGTAAATGTAGAAGTTGTAGACGAAAACGACAACAGCCAGAAATATCATCAGC
 TCACTCTCTGATCAGATTATGGAGGATCCCTCCAGGAGTGGTGTGGCCCTTCAAACACGGGAC
 AAGACTCAGGGGAAAATGGGAAGTCAGGTGTAGCTTAAGTAGAGGTGTTCCATTTAAGATTCTCTTC
 TTCTAATAATTACTACAAGCTAGTAACAGATGAGGCCCTGGATCGGGAGCAGACCCAGAGTACAACGTC
 ACCATCGCAGCCACAGACAGGGCAAGCCTCCGTTATCCTCCAGCAAAACCATAACCCTGCACATTACTG
 ACGTCAATGACAACGCGCGGTTTTTCGGACAGTCAACCTACCTGGTCCACGTGCCAGAAAACAACCGCC
 GGGTGCCTCCATAGCGCAAGTCACTGCTCTGACCCAGACTTCGGGCTCAACGGCCGTGTCTCTACTCT
 CTCATTGCCAGCGACCTGGAGTCAACGACGCTGTCGCTACGTGTCCGTGAGCGCGCAGAGCGGGTGG
 TGTTCCGCGCAGCGCCCTTCGACCAGGACGCTGCGCACCTTCGAGCTCAGCTGCAGGCCCGCGACCA
 GGGCTCGCCCGCCTCAGCGCAATGTGAGCCTGCGCGTGTGGTGGGCGACCGTAACGACAACGCACCG
 CGGGTGTGTACCCTGCGCTGGGTCCCGACGGCTCCGCGCTCTTCGACACAGTCCCGCGGGCCGCGCAGC
 CAGGCTACCTGGTGACCAAGGTGGTGGCCGTGGACCGGACTCGGGGCACAATGCCTGGCTGCCTACCA
 CGTGGTGCAGGCCAGTGAGCCCGGGCTTTCAGCCTGGGGCTGCGAACAGGCGAGGTGCGCATGGTGCCT
 GCTTTGGGTGACAAGGACTCGGTCCGCCAGCGCCTGCTAGTCGCTGTAAGAGATGGAGGACGCCACCC
 TTTAGCCACTGCCACGCTGCACCTGGTGTTCGAGATAGCTTGAAGAGGTAAGTCCCGGATTCAGCGA
 CCATCCCACACCTCTGACTCCCAGGCTGAGATGCAGTTTTACCTGGTGGTGGCCTTGGCCTTGATTTCT
 GTGCTCTTTCTCCTCGCGGTGATTCTAGCTATTGCTCTACGCTGCGACAGTCTTTCAGCCCTACTGCAG
 GAGACTGCTTTGAGTCAGTTCTCTGCTCCAAGTCCGACCTGTGGTCCCCCAACTACAGTGAAGGAAC
 GTTGCCCTATGCCTATAATTTTTGTGCTGGGGATCAAATGAATCCAGAATTTAATTTTTTACATCT
 GTTGATCATTGTCCAGCCACACAAGATAACCTCAACAAAGATAGCATGCTACTGGCTAGCATTTTAACTC
 CCAGCGTTGAAGCAGATAAGAAGATTCTTAAACAGGTAAGTATT

ACGCGTACGCGCGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC222084 representing NM_032101
Red=Cloning site Green=Tags(s)

MGGSCAQRRRAGPRQVLFPLLLPLFYPTLCEPIRYSIPEELAKGSVVGNLAKDLGLSVLDVSARELRVSA
EKLHFSVDAQSGDLLVKDRIDREQICKERRRCELQLEAVVENPLNIFHVI VVIEDVNDHAPQFRKDEINL
EISESVSLGMGTILESAEDPDISMNSLSKYQLSPNEYFSLVEKDNPDGGKYPELVLQKTLDRQSAHHL
VLTALDGGDPPRSGTAQIRILVIDANDNPPVFSQDVYRVSLREDVPPGTSILRVKATDQDEGINSEITYS
FFGVADKAQHVFSLDYTTGNILTQQPLDFEEVERYTINIEAKDRGSLSTRCKVIVEVVDENDNSPEIIIT
SLSDQIMEDSPPGVVVALFKTRDQDSGENGEVRCSLSRGVPFKIHSSSNYYKLVTDALDREQTPEYNV
TIAATDRGKPPPLSSSKTITLHITDVNDNAPVFGQSAYLVHVPENNQPGASIAQVSASDPDFGLNGRVSYS
LIASDLESRTLSSYVSVAQSGVVFAQRAFDHEQLRTFELTLQARDQGSPALSANVSLRVLVGDRNDNAP
RVLYPALGPDGSALFDTVPRAAQPGYLVTKVVAVDADSGHNAWLSYHVQASEPGLFSLGLRTGEVRMVR
ALGDKDSVRQRLLVAVRDGGQPPLSATATLHLVFADSLQEVLPDFSDHPTSDSQAEMQFYLVALALIS
VLFLLAVALIALRLRQFSPTAGDCFESVLCSSGPGVPPNYSEGTLPYAYNFCVPGDQMNPEFNFFTS
VDHCPATQDNLNKDSMLLASILTPSVEADKKILKQVSI

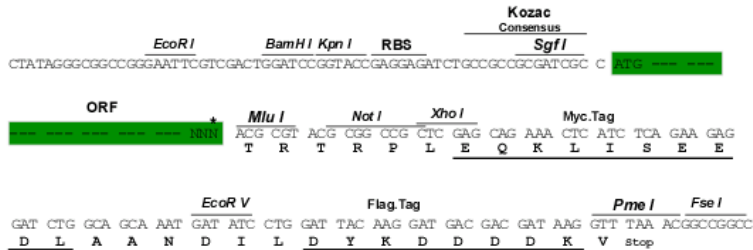
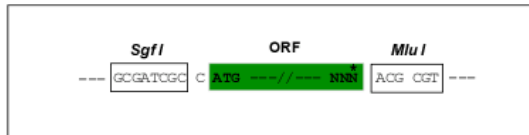
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8011_c06.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_032101

ORF Size: 2424 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_032101.3](#)

RefSeq Size: 2715 bp

RefSeq ORF: 2427 bp

Locus ID: 56099

UniProt ID: [Q9Y5F8](#)

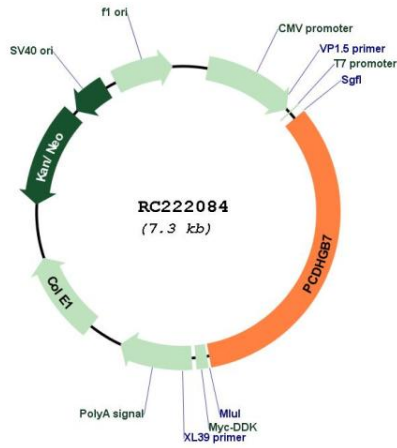
Cytogenetics: 5q31.3

Protein Families: Transmembrane

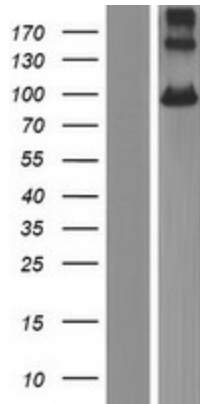
MW: 85 kDa

Gene Summary: This gene is a member of the protocadherin gamma gene cluster, one of three related clusters tandemly linked on chromosome five. These gene clusters have an immunoglobulin-like organization, suggesting that a novel mechanism may be involved in their regulation and expression. The gamma gene cluster includes 22 genes divided into 3 subfamilies. Subfamily A contains 12 genes, subfamily B contains 7 genes and 2 pseudogenes, and the more distantly related subfamily C contains 3 genes. The tandem array of 22 large, variable region exons are followed by a constant region, containing 3 exons shared by all genes in the cluster. Each variable region exon encodes the extracellular region, which includes 6 cadherin ectodomains and a transmembrane region. The constant region exons encode the common cytoplasmic region. These neural cadherin-like cell adhesion proteins most likely play a critical role in the establishment and function of specific cell-cell connections in the brain. Alternative splicing has been described for the gamma cluster genes. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC222084



Western blot validation of overexpression lysate (Cat# [LY410383]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222084 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).