

Product datasheet for **RC211321**

PCDHGB4 (NM_032098) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PCDHGB4 (NM_032098) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PCDHGB4
Synonyms:	CDH20; FIB2; PCDH-GAMMA-B4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC211321 ORF sequence

Red=Cloning site Blue=ORF Green=Tags(s)

 TTTTGAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGGGGAGCGCGCCGGGAGCTGGGCCGGCTGAGAGGCTGCCAGTGCTCTTTCTCTTCTGCTGTCTT
 TGTTCGCGCGCTCTGTGAGCAGATCCGCTACAGGATCCCGAGGAAATGCCAAGGGCTCCGTAGT
 GGGGAACCTCGCCACGGACCTGGGGTTCAGCGTCCAGGAGTTACCGACTCGAAAACTGCGCGTCAGTTCTG
 GAGAAGCCTTACTTCACCGTGAGCGCAGAGAGCGGGGAGTTGCTTGTGAGCAGCAGGCTAGACAGGGAGG
 AGATATGCGGGAAGAAGCCAGCTTGTGCTCTGGAATTTGAGGCTGTTGCTGAAAACTCACTGAACCTTTA
 TCACGTGAATGTGGAGATCGAGGACATTAATGACCACACGCCAAAATTCACGCAAAATCCTTTGAGCTG
 CAAATAAGTGAGTCTGCACAGCTGGCACACGATTATATTAGGATCTGCCCATGATCGGATATTGGTA
 GCAACACACTGCAGAATTACCACTCAGTCCCAGTGATCATTTCTACTGATAAATAAGAGAAATCAGA
 TGGCAGTAAATACCCTGAGATGGTATTGAAGACACCTTTGGACAGAGAAAAGCAGAAATCCTACCACTTG
 ACTTTGACTGCCTTGGACTTTGGAGCTCCACCCCTAAGCAGCACTGCACAGATACACGTTCTAGTACTG
 ATGCCAATGATAATGCTCCAGTGTTCAAGACGTATACAGGGTGAGCCTTTAGAAAACTGTACCC
 GGGGACCACGGTGTACAGGTGACTGCCACGGACAGGATGAGGGTGCAATGCCGAGATTACTTTCTCT
 TTCAGTGAAGTAGCCAGATCACCAATTTGACCTGAACCTAACACCGGGGAAATTAAGTTTAAATA
 CATTAGATTTTGAAGAAGTCAAAGAATATTCATAGTTTTGGAAGCAAGGGACGGTGAGGAATGATTGC
 GCAATGCACAGTGGAGGTAGAAGTCATAGATGAAAATGACAACGCCCCAGAGTGATATCCAGTCTCTA
 CCCAACCTAATTATGGAGGACGCCGAGCTGGGAACACATATTGCTTTGCTCAAAGTCCGTGACAAGGATT
 CCAGACACAATGGAGAAGTGACTTGTAAATTGGAAGTGATGTTCCATTTAAATATTAACCTTCTCAAG
 AAACACGTATAAATTAGTGACAGATGCTGTTCTAGACCGCGAGCAGAATCCAGAGTACAATATAACCGTT
 ACGGCAACAGATCGGGCAAGCCTCCCCTCTCCTCCAGTTCAGCATCACCTGCACATTGGTGATGTAA
 ATGACAACGCTCCGGTTTTCTCAGAGTCTTCTATATAGTCCACGTGGCCGAGAACACCCGCTGGAGC
 CTCTATTTACAAGTCAGGGCTTCTGATCCGGAAGTGGGCCCCAACGGCAAGTCTTACTGCATCATG
 GCCAGTGACCTGGAGCAGCGGGAGCTGTATCCTACGTGTCCATAAGCGCGGAGAGCGGGGTGGTGTTCG
 CGCAGCGCGCTTCGACCAGGAGCAGCTGCGCGCCTTCGAACCTCACACTGCAGGCCCCGACAGGGCTC
 GCCAGCGCTCAGCGCAACGTGAGCCTGCGCGTGTAGTGACGACCGCAACGACAATGCGCCACGGGTG
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 GGCGACAGGGACGCCGTCCGCCAGCGCCTTCTGGTCCCGTGCGTGACGGTGGACAGCCACCACTCTCGG
 CCACTGCCACGTTGCACCTGGTCTTCGCCGACAGCTTGACAGGAGTGCTGCCGATATCACTGACCGCCC
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 TTGAGTTACAGGACAAGACATACTTTGCGGTGATTCATCTGGGGCCTATTTCACCTTTGTAATCCAGTG
 AATTGACTTCCATCAGGTGAGTTTCCTT

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC211321 protein sequence
 Red=Cloning site Green=Tags(s)

MGSGAGELGRAERLPVLFLFLLSLFCPALCEQIRYRIPEEMPKGSSVGNLATDLGFSVQELPTRKLRVSS
 EKPYYFTVSAESGELLVSSRLDREEICGKKPACALEFEAVAENPLNFYHVNVEIEDINDHTPKFTQNSFEL
 QISESAQPGTRFILGSAHDADIGSNTLQNYQLSPSDHFSLINKEKSDGSKYPEMVLKTPLDREKQKSYHL
 TLTALDFGAPPLSSTAQIHVLVTDANDNAPVFSQDVYRVSLSENVYPGTTVLQVTATDQDEGVNAEITFS
 FSEASQITQFDLNSNTGEITVLNLTDFEEVKEYSIVLEARDGGGMIAQCTVEVEVIDENDNAPEVIFQSL
 PNLIMEDAELGTHIALLKVRDKDSRHNGEVTCKLEGDVPFKILTSSRNTYKLVTDVLDREQNPEYNITV
 TATDRGKPPSSSSSITLHIGDVNDNAPVFSQSSYIVHVAENPPGASISQVRASDPDLGPNGQVSYCIM
 ASDLEQRELSSYVSISAESGVVFAQRAFDHEQLRAFELTLQARDQGSPALSANVSLRVLVDDRNDNAPRV
 LYPALGPDGSALFDMVPHAAEPGYLVTKVVAVDADSGHNAWLSYHVLQASEPGLFSLGLRTGEVRTARAL
 GDRDAVRQRLLVAVRDGGQPPLSATATLHLVFADSLQEVLPDITDRPDSDLQAELOFYLVVALALISVL
 FLVAMILAIALRLRRSSSPASWSCFQGLCVKSESVPVPPNYSEGTLPYSYNLCVAHTGKTEFNFLKCSEQ
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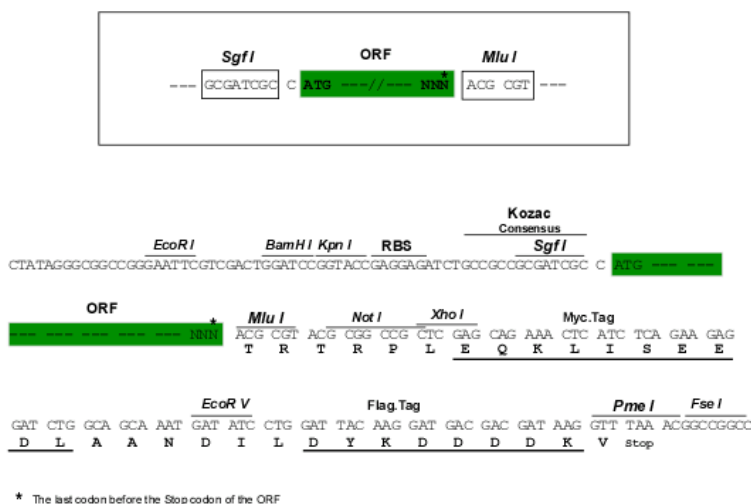
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6369_h01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_032098

ORF Size: 2409 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_032098.1](#), [NP_115269.1](#)

RefSeq Size: 2412 bp

RefSeq ORF: 2412 bp

Locus ID: 8641

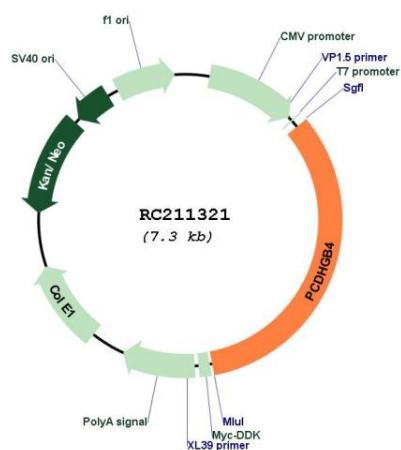
UniProt ID: [Q9UN71](#)

Cytogenetics: 5q31.3

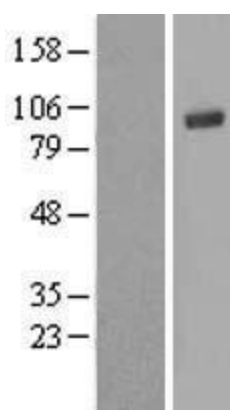
MW: 87.4 kDa

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. This particular family member is expressed in fibroblasts and is thought to play a role in wound healing in response to injury. Alternative splicing has been described for the gamma cluster genes. [provided by RefSeq, Jul 2008]

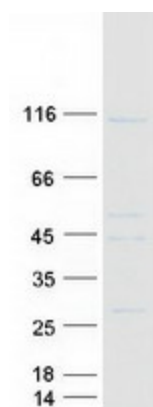
Product images:



Circular map for RC211321



Western blot validation of overexpression lysate (Cat# [LY410380]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211321 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PCDHGB4 protein (Cat# [TP311321]). The protein was produced from HEK293T cells transfected with PCDHGB4 cDNA clone (Cat# RC211321) using MegaTran 2.0 (Cat# [TT210002]).