

Product datasheet for **RC201287**

PCDHGC3 (NM_002588) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PCDHGC3 (NM_002588) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PCDHGC3
Synonyms:	PC43; PCDH-GAMMA-C3; PCDH2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC201287 representing NM_002588
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGTCCCAGAGGCTGGAGGAGCGGACTGGTAAGCACCCGGAGGGTAGTGGGAGTTTTGCTTCTGCTTG
 GTGCCTTGAACAAGGCTTCCACGGTCATCACTATGAGATCCCGAGGAAAGAGAGAAGGGTTTCGCTGT
 GGGCAACGTGGTCGGAACCTTGGTTTGGATCTCGGTAGCCTCTCAGCCCGCAGGTTCCGGGTGGTGTCT
 GGAGCTAGCCGAAGATTCTTTGAGGTGAACCGGGAGACCGGAGAGATGTTTGTGAACGACCGTCTGGATC
 GAGAGGAGCTGTGTGGGACACTGCCCTTGTCACTGTAACCTGGAGTTGGTAGTGGAGAACCCGCTGGA
 GCTGTTACAGCGTGAAGTGGTATCCAGGACATCAACGACAACAATCCTGCTTCCCTACCCAGGAAATG
 AAATTGGAGATTAGCGAGGCCGTGGCTCCGGGGACGCGCTTCCGCTCGAGAGCGCGCACGATCCCGATG
 TGGGAAGCAACTTTTACAAACCTATGAGCTGAGCCGAAATGAATACTTTGCGCTTCGCGTGACAGCGCG
 GGAGGACAGCACCAAGTACGCGGAGCTGGTGTGGAGCGCGCCCTGGACCAGAACGGGAGCCTAGTCTC
 CAGTTAGTGCTGACGGCGTTGGACGGAGGGACCCAGCTCTCCGCCAGCCTGCCTATTCACATCAAGG
 TGCTGGACGCGAATGACAATGCGCCTGTCTTCAACCAGTCCTTGTACCGGGCGCGCTCCTGGAGGATGC
 ACCCTCCGGCACGCGCTGGTACAAGTCCTTGCAACGGATCTGGATGAAGGCCCAACGGTAAAATTATT
 TACTCCTTCGGCAGCCACAACCGCGCCGGCGTGGCGCAACTATTCGCTTAGACCTTGAACCGGGATGC
 TGACAATCAAGGGTGGCTGGACTTCGAGGACACCAAACTCCATGAGATTTACATCCAGGCCAAAGACAA
 GGGCGCAATCCCGAAGGAGCACATTGCAAAGTGTGGTGGAGGTTGGATGTGAATGACAACGCCCGCG
 GAGATCACAGTCACCTCCGTGTACAGCCAGTACCCGAGGATGCCCTCTGGGGACTGTCATCGCTTTCG
 TCAGTGTGACTGACCTGGATGCTGGCGAGAACGGGCTGGTACCTGCGAAGTTCCACCGGTCTCCCTTT
 CAGCCTTACTTCTCCCTCAAGAATTACTTCACTTTGAAAACCAAGTGCAGACCTGGATCGGGAGACTGTG
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 GTGTTCAAGTGTCCGACATCAATGACAACCTCCACAATCTTCTCAATCTTCTACGACGTTTACATTGA
 AGAAAACAACCTCCCGGGGCTCCAATACTAAACCTAAGTGTCTGGACCCCGACGCCCGCAGAATGCT
 CGGCTTTCTTTCTTCTTGGAGCAAGGAGCTGAAACCGGGCTAGTGGTGCCTATTTCAATAAATC
 GTGACAATGGCATAGTGTATCCTTAGTGCCCTAGACTATGAGGATCGGCGGGAATTTGAATTAACAGC
 TCATATCAGCGATGGGGCACCCGGTCTAGCCACCAACATCAGCGTGAACATATTTGCTACTGATCGC
 AATGACAATGCCCCCAGGTCTATATCCTCGCCAGGTGGGAGCTCGGTGGAGATGCTGCCTCGAGGTA
 CCTCAGCTGGCCACCTAGTGTACGGGTGGTAGGCTGGGACGCGGATGCAGGGCACAAATGCCTGGCTCTC
 CTACAGTCTCTGGGATCCCCTAACAGAGCCTTTTTGCCATAGGGCTGCACACTGGTCAATCAGTACT
 GCCCGTCCAGTCCAAGACACAGATTACCCAGGCAGACTCTCACGGTCTTGATCAAAGACAATGGGGAGC
 TTCGCTCTCCACCAGTGTACCCTCACTGTGTACGTAACCGAGGACTCTCCTGAAGCCCGAGCCGAGTT
 CCCCTCTGGCTCTGCCCGGGAGCAGAAAAAAATCTCACCTTTTATCTACTTCTTTCTAATCCTG
 GTTCTGTGGGTTTGTGGTACAGTGTTCGGAGTAATCATATTCAAAGTTTACAAGTGAAGCAGTCTA
 GAGACCTATACCGAGCCCGGTGAGTCACTGTACCGAACACAGGGCCCTCTTGACGCGGACGCGCT
 GCGGGGAGGCCTGATGTCGCGCACCTTTACCATCAGGTGTATCTCACCGGACTCCCGCCGACGCGAC
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 CCCAACAAACAGTTTGACACAGAGATGTGCAAGCCATGATCTTGGCGTCCGCCAGTGAAGCTGCTGATG
 GGAGCTCCACCCTGGGAGGGGTGCCGGCACCATGGGATTGAGCGCCCGCTACGGACCCAGTTCACCT
 GCAGCACGTGCCCGACTACCGCCAGAATGTCTACATCCAGGCAGCAATGCCACACTGACCAACGCAGCT
 GGCAAGCGGGATGGCAAGGCCCCAGCAGGTGGCAATGGCAACAAGAAGAAGTCGGGCAAGAAGGAGAAGA
 AG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC201287 representing NM_002588
 Red=Cloning site Green=Tags(s)

MVPEAWRSGLVSTGRVVGVL LLLGALNKASTVIHYEIPEREKGFVGNVAVANLGLDLGSLSARRFRVVS
 GASRRFFEVRNRETGMFVNDRLDREELCGTLPSCVTTLLELVENPLELFSVEVVIQDINDNPAFPTQEM
 KLEISEAVAPGTRFPLESAHDPDVGNSLQTYELSRNEYFALRVQTREDSTKYAELVLERALDREREPSL
 QLVL T ALDGGTPAL SASLPIHIKVL DANDNAPVFNQSL YRARVLEDAPS GTRVVQVLATDLDEGPNGEII
 YSFGSHNRAGVRQLFALDLVTGMLTIKGR LDFEDTKLHEIYIQAKDKGANPEGAHCKV LVEVVDVNDNAP
 EITVTSVYSPVEDAPLGTVIALLSVTDLDAGENGLVTCEVPPGLPFLSTSSLKNYFTLKT SADLDRETV
 PEYNLSITARDAGTPSL SALTIVRVQVSDINDNPPQSSQSSYDVYIEENNLPGAPILNLSVWDPDAPQNA
 RLSFFLLEQGAETGLVGRYFTINRDNGI VSSLVPLDYEDRREFELTAHISDGGTPVLATNISVNI FVTDR
 NDNAPQVLYPRPGGSSVEMLPRGTSAGHLVSRVVGWDADAGHNAWLSYLLGSPNQSLFAIGLHTGQIST
 ARPVQD TDSRQTLTVL IKDNGEPSLSTATLTVSVTDSPEARAEFPGSAPREQKKNLTFYLLLSLIL
 VSVGFVTVFVGVIIFKVYKWKQSRDL YRAPVSSLYRTPGPSLHADAVRGGMLSPHLYHQVYLT TDSRRSD
 PLLKKPGAASPLASRQNTLRSCDPVFYRQVL GAESAPPGQQAPPNTDWRFSQAQRPGTSGSQNGDDTGTW
 PNNQFDTEMLQAMILASAEADGSSTLGGGAGTMGLSARYGPQFTLQHVDPYRQNVYIPGSNATLTNAA
 GKRDGKAPAGGNGNKKKSGKKEKK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3219_c05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



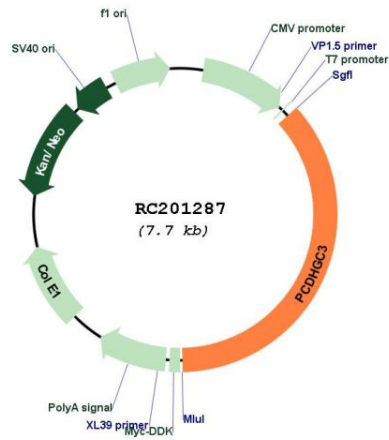
* The last codon before the Stop codon of the ORF

ACCN: NM_002588

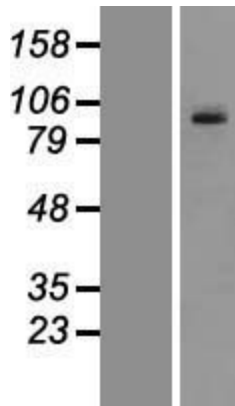
ORF Size: 2802 bp

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:	<ol style="list-style-type: none">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_002588.4
RefSeq Size:	4726 bp
RefSeq ORF:	2805 bp
Locus ID:	5098
UniProt ID:	Q9UN70
Cytogenetics:	5q31.3
Domains:	CA
Protein Families:	Transmembrane
MW:	101.08 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 RC201287



Western blot validation of overexpression lysate (Cat# [LY419228]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201287 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).