

Product datasheet for **RC211316**

PCDHGC5 (NM_032407) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PCDHGC5 (NM_032407) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PCDHGC5
Synonyms:	PCDH-GAMMA-C5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC211316 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGGCCCAAGACACTCCACAGCTCGCTGGAAATGGCAAGTGTGTGCATGTTGTCCTGTGTCTGCT
 GGGGCTGGGTGTCTGGGCAGTTCTGTTACTCAGTGGTGGAGGAGTCTGAGCCGGGACGCTGGTGGGGAA
 TGTTGCTCAGGATCTGGGCTTAAAGATGACAGATCTGTTGAGCCGGCGGCTGCAACTGGGCTCTGAGGAG
 AATGGGCGCTATTTTTCCCTGAGCTTGATGAGTGGTGCCTGGCAGTGAATCAAAAGATTGACCGAGAAA
 GCCTATGTGGAGCCAGCACCAGCTGCCTGCTGCCAGTGCAGGTGGTACTGAACACCCCTGGAGCTAAT
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ACGCGTACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC211316 protein sequence
 Red=Cloning site Green=Tags(s)

MGPKTLPQLAGKWQVLCMLSLCCWGWVSGQLRYSVVEESEPGTLVGNVAQDLGLKMTDLLSRRLQLGSEE
 NGRYFSLSLMSGALAVNQKIDRESL CGASTSCLLPVQVVEHLELIRVEVEILDNDNSPSFATPEREM
 RISESAASGARFPLDSAQDPDVGTTNTVSYFYLSPNSHFLSNVKTLDGKPFPELVLEQQLDREAQARHQL
 VLTAVDGGTTPARSGTTLISVIVLDINDNAPTFQSSVLRVGI PENAPIGTL LLLRLNATDPDEGTNGQLDYS
 FGDHTSEAVRNLFGLDPSSGAIHVLGPIDFEESRFYI HARARDQGPAMEGHCVIQVDVGDVNDNAPEV
 LLASLANPVLESTPVGTVVG LFNVRDRDSGRNGEVS LDISPDLPFQIKPSENHYSLLTSQPLDREATSHY
 IIELLASDAGSPSLHKHLTIRLNI SDVNDNAPRFNQQLY TAYILENRPPGSLLCTVAASDPDTGDNARLT
 YSIVGNQVQGAPASSFVYVNPEDGRIFAQRTFDYELLQMLQIVGVVDRD SGSPPLHANTSLHVFVLDENDN
 APAVLHPRPGWEHSAPQRLPRSAPPGSLVTKVTAVDADAGHNAWLSYLLPQSTAPGLFLVSTHTGEVRT
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 VSLLSLVTFTFLSAKCLQGNADGGGGGCCRRQDSPSPDFYKQSSPNLQVSSDGLKYMEVTLRPDTSQ
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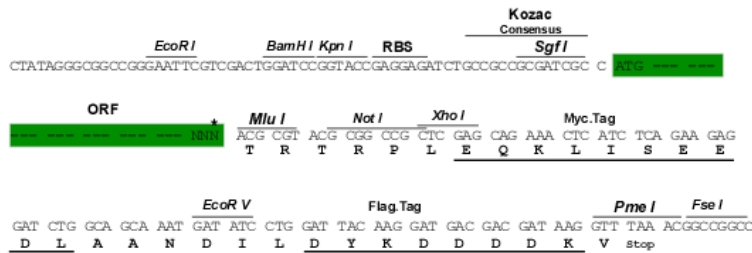
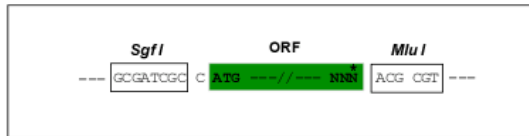
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6370_h09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

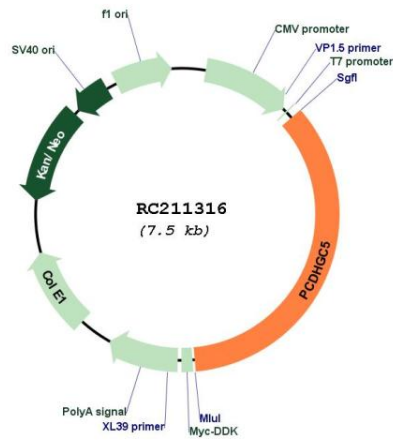
Cloning sites used for ORF Shuttling:



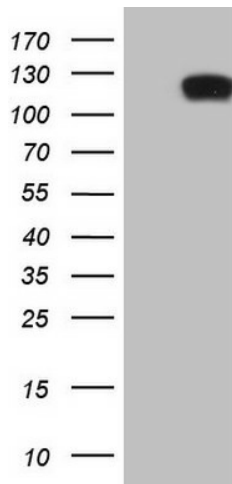
* The last codon before the Stop codon of the ORF

ACCN:	NM_032407
ORF Size:	2634 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_032407.1 , NP_115783.1
RefSeq Size:	2637 bp
RefSeq ORF:	2637 bp
Locus ID:	56097
UniProt ID:	Q9Y5F6
Cytogenetics:	5q31.3
Protein Families:	Transmembrane
MW:	95.1 kDa
Gene Summary:	<p>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]</p>

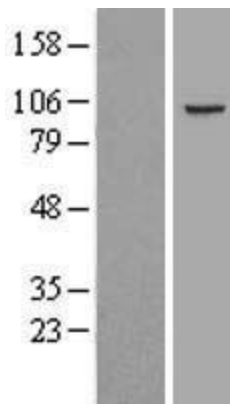
Product images:



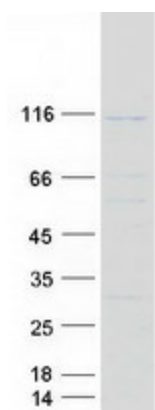
Circular map for RC211316



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PCDHGC5 (Cat# RC211316, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PCDHGC5 (Cat# [TA807819])(1:2000). Positive lysates [LY410148] (100ug) and [LC410148] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY410148]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211316 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PCDHGC5 protein (Cat# [TP311316]). The protein was produced from HEK293T cells transfected with PCDHGC5 cDNA clone (Cat# RC211316) using MegaTran 2.0 (Cat# [TT210002]).