

## Product datasheet for **RC210864**

### PCDHGA10 (NM\_032090) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PCDHGA10 (NM_032090) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PCDHGA10
Synonyms:	PCDH-GAMMA-A10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide  
Sequence:

>RC210864 representing NM\_032090  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGGCCGCTCAAAGGAATCGCTCAAAGGAATCAAAGGATTGCAGCGGGCTGGTCTGCTCTGCCTTTTCT  
 TCGGGATTCCATGGGAGGCTGGAGCCCGCAGATCTCCTACTCAATTCCTGAGGAATTAGAGAAAGGCTC  
 TTTCTGGGCAACATCTCCAAGGACTTGGGTCTGGCGCCCGGGAGCTGGCGGAGCGGGAGTCCGCATA  
 GTCTCCAGAGGTAGGACGCAGCTTTTCTCTCTGAACCCGCGCAGCGGAGCTTGATCACCAGCGGAGGAG  
 TAGACCGGGAGGAGCTCTGCGCTCAGAGCGCGGGTGCCTGGTGGTGGTAAATATCCTTGTGGAAGACAG  
 GGTGAACTTTTTGGGATAGAAATAGAAGTAAGTATCAATGACAATGCTCCAAAATCCAAGCAGAA  
 AATCTAGACGTAAAAATTAATGAAAATGTCGCTGCGGGAATGCGTTTTCTCTCCCGGAAGCTATTGATC  
 CGGATGTGGGCGTGAACCTCCCTGCAGAGCTATCAGCTCAGCCCAATAAGCACTTCTCCCTAAGAGTTCA  
 GAGCCGTGCCAATGGCGTCAAGTACCCGGAGCTGGTACTGGAGCACTCCCTAGATCGCGAGGAAGAGGCC  
 ATTCACCACCTGGTCTCACCGCTCCGACGGGGTGACCCTCTCCGATCTGGCACTGTCCTTGTCAAGT  
 TGACTGTCTTCGATGCAATGACAACGCGCCGGTCTTACCTTGCAGAATACCGAGTGAGTGTCTCTGA  
 GAATTTGCCTGTGGGCACTCAGCTGCTGACAGTACAGCCACCGACAGGGACGAAGTGCCAATGGAGAA  
 GTGACATATTCATTCCGAAAATACCTGACACGCAATTGTTGAAGTTCCAATAAACAATACTGGAG  
 AAATAAAAATATCAGAAAATCTAGATTATGAAGAAACCGTTTCTATGAAATAGAAAATACAAGCAGAAGA  
 TGGAGGAGCATCTTGAACCTGCAAAAGTGTGATTACAGTGAAGATGTAATGACAACAGTCCAGAG  
 CTGACCATCACGTCTCTATTTAGTCCAGTGAAGATTCACCTCTGGGAACAGTCTGATGCCCTTTTAA  
 ATGTGATGATTTAGACTCTGAGCAGAATGGACAGGTAACCTGTCCATTTTGGCGTATCTACCATTTAA  
 ATTAGAAAAGTCCATTGACAGTTATTACAGATTGGTGATACACAGAGCCCTTGACAGGGAACAGGTATCC  
 TCTTACAATATCACAGTACAGCCACAGATGGGGAAAGTCTCCTCTATCAACGGAAGCTCACTTTATGC  
 TACAAGTGGCAGATATCAATGACAACCCACCTACCTTCTCAAGTCTCCTACTTTACCTATATCCAGA  
 GAACAACGCCAGGGTGCCTCCTTCTCAGTGACAGCGCTGGACCCGGACAGCAAGAGAATGCCAG  
 ATTATTTACTCCCTGGCTGAAGACACCATCCAGGGGTACCTCTGTCTCATAATATCCATCAACTCAG  
 AACTGGCGTCTGTATGCACTCAGATCCTTCGACTATGAGCAGTTTCATGAGCTACAGATGCAGGTGAC  
 AGCCAGCGACAGCGGGATCCTCCACTCAGCAGCAACGTGTCGTTGAGCCTGTTTGTGCTGGACCAGAAC  
 GACAATGCGCCCGAGATCCTGTACCCCGCCCTCCCCACAGACGGTCCACAGGCGTGGAGCTGGCGCCCC  
 GCTCCGCAGAGCCCGGCTACCTGGTGACCAAGGTGGTGGCGGTGGACAGAGACTCCGGCCAGAACGCTG  
 GCTGTCTACCGTCTGCTCAAGGCCAGCGAGCCGGGACTCTTCGCGGTGGGGGAGCACACGGGCGAGGTG  
 CGCACGGCGGAGCCCTGCTGGACAGAGACGCGCTCAAGCAAAGCCTCGTAGTGGCCGTCAGGACCACG  
 GCCAGCCCCCTCTCTCCGCCACTGTACGCTCACCGTGGCCGTGGCCGACAGCATCCCCAAGTCTGGC  
 GGACCTCGGCAGCTTCGAGTCTCCAGCTAACTCTGAAACCTCAGACCTCACTCTGTACCTGGTGGTAGCG  
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 ACAAGTACGCCTGTGCAAGCTTCAGGAGCGGCTTGACAGGTGTGTCGGCTCGCACTTTGTGGGCGT  
 GGACGGGTTTCGGGCTTCTGCAAGCTTATCCACAGAGTCTCTCACCCGGACTCGGAAAGAGT  
 CAGCTGATCTTCCCCAGCCCAATTATGCGGACAGCTCATCAGCCAGGAGAGCTGTGAGAAAAACGATC  
 CTTTGTCTTTGTTAGATGATTGAAAGTTTCTATAGAGGATACCCATTGGTTCCAGTGAGTTTTATTTT  
 CATTTTTACTTTTGTAAAAAAGATTGGTTTTTACTTTGAAGTTTGGCGCATGATGGTGGAAAGT  
 GTAATGCTAAAACACTGATGAGTAGAATT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC210864 representing NM\_032090  
 Red=Cloning site Green=Tags(s)

MAAQRNRSKESKDCSGLVLLCLFFGIPWEAGARQISYSIPEELEKGSFVGNISKDLGLAPRELAERGVRI  
 VSRGRTQLFSLNPRSGSLITAGRIDREELCAQSARCVVFNILVEDRVKLFIEIEVTDINDNAPKFQAE  
 NLDVKINENVAAGMRFPLEAIDPDVGVNSLQSYQLSPNKHFLSRVQSRANGVKYPELVLEHSLDREEEA  
 IHHLVLTASDGGDPLRSGTVLVSIVFDANDNAPVFTLPEYRVSVPENLPVGTQLLTVTATDRDEGANGE  
 VTYSFRKLPDTQLLKFLQNKYTGEIKISENLDYEETGFYEIEIQAEDEGGAYLATAKVLITVEDVNDNSPE  
 LTITSLFSPVTEDSPLGTVVALLNVHDL DSEQNQVTC SILAYLPFKLEKSIDSYYRLVIHRALDREQVS  
 SYNITVTATDGGSPPLSTEAHFMLQVADINDNPPTFSQVSYFTYIPENNARGASIFSVTALDPDSKENAQ  
 IISLAEDTIQGVPLSSYISINSDTGVLVALRSFDYEQFHLMQV TASDGGPPLSSNVSLSLFVLDQN  
 DNAPEILYPALPDGSGVELAPRSAEPGYLVTKVAVDRDSGQNAWLSYRLLKASEPGLFAVGEHTGEV  
 RTARALLDRDALKQSLVAVQDHGQPPLSATVTLTVAVADSIQVVLADLGSFESPANSETDLTLYLVA  
 VAAVSCVFLAFVIVLLAHLRRWHKSRLQASGGGLTGVSGSHFVGDVGRAFLQYTSHEVSLTADSRKS  
 HLIFPQPNYADTLISQESCEKNDPLSLDDSKFPIEDTPLVPVSFIFIFTFVKKKIGFYFEVCGMMVES  
 VNAKTLMSRI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk8103\\_a05.zip](https://cdn.origene.com/chromatograms/mk8103_a05.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:

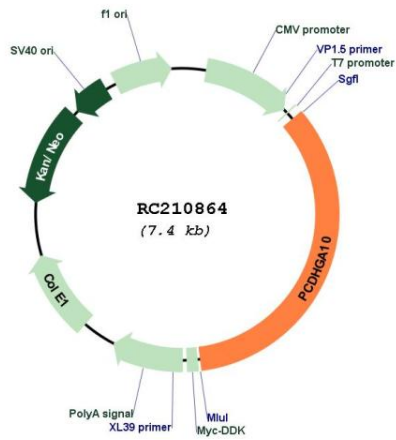
Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

<b>ACCN:</b>	NM_032090
<b>ORF Size:</b>	2550 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_032090.1</a> , <a href="#">NP_114479.1</a>
<b>RefSeq Size:</b>	2553 bp
<b>RefSeq ORF:</b>	2553 bp
<b>Locus ID:</b>	56106
<b>UniProt ID:</b>	<a href="#">Q9Y5H3</a>
<b>Cytogenetics:</b>	5q31.3
<b>Domains:</b>	CA
<b>MW:</b>	92.9 kDa
<b>Gene Summary:</b>	<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 RC210864