

Product datasheet for **RC211144**

PCDHAC2 (NM_031883) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PCDHAC2 (NM_031883) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PCDHAC2
Synonyms:	PCDH-ALPHA-C2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RC211144 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGCAGGCGGCCACAGACCTGCGGGACAGAGCATCCACGGCTCCGGCGGCCATGCCTGGCTGC
 TGCTACTGCCTCTCCTGCTGCTGTTGCTGCTGCTGCTACCTGGCCAGCGGCCTCCAGCTGCGATACTC
 TGTGCCAGAGGAGCAGGCACCCGGCGCGCTCGTGGCAACGTGGCTCGCGCGCTGGGGCTTGAGCTGCGG
 CGCTTGGGGCCGGTTGCTTGGCATCAACCATCTGGGTGCGCCAGTCCGCGCTACCTGGAGCTGGACC
 TGACGAGTGGAGCGCTCTTCGTC AACGAGCGCATTGATCGGGAGGCGCTGTGTGAGCAGCGGCCTCGCTG
 CCTGCTCAGCCTGGAAGTGTGGCGCACAAACCCGTGGCGGTGAGCGCCGTTGAGGTGAAATATTGGAC
 ATCAACGACAACCTACCGCGTTTCCCGCGCCAACTACCAGTTCAGGTAAGCGAATCGGTGGCGCCTG
 GAGCGCGCTTTCACATAGAGAGTGGCAGGACCCCGACGTGGGCGCAACTCAGTACAGACCTACGAGCT
 CAGCCCCAGCGAGCACTTCGAGCTGGACCTTAAGCCCTGCAGGAGAACAGTAAAGTGTGAGCTGGTG
 CTGCGTAAGGGCCTAGACCCGGGAGCAGGACGCCTTGCACCACCTGGTTCTCACAGCCGTGGATGGGGCA
 TTCCAGCCCGCTCGGGTACGGCACAGATCTCTGTGCGTGTCTGGACACTAACGACAACCTCTCTGCCTT
 TGACCAGTCCACTTATCGCGTCCAGCTACGGGAGGACTCACCCCAAGGCACATTGGTGGTGAAGCTGAAT
 GCCTCAGACCCGGATGAGGGCTCCAATGGTGAGCTCAGTACTCCTTGAGCAGCTACACGTCCGACCCGGG
 AGAGGCAGCTCTTCAGCATAGATGCCAGTACCGGGGAAGTGCAGTAATTGGGGGGCTGGATTATGAGGA
 AGCCTCCTCTACCAGATCTATGTGCAGGCGACTGACCGGGTCCAGTGCCCATGGCAGGTCAGTGAAG
 GTGCTGGTGGACATCGTGGACGTGAATGACAATGCCCCAGAGTGGTGTCTACGGACCTGTATAGCCCA
 TGCTGAGAATGCTACACCCAACACCATTTGTGGCCGTTCTCAGTGTCAATGACCAAGACTCAGGCCCA
 CCGGAAAAGTGAAGCTGGGTCTGGAGGCCACACTGCCTTTCGACTGAATGGCTTTGGAAAACCTCTATA
 CTGGTGGTGAAGCGCCACTGGACCGAGAGCGGGTGGCTGTCTACAACATCACGGTGACAGCCACAGATG
 GGGGAATACCGCAGCTCACATCCCTGCGTACACTGAAGGTTGAGATCTCTGACATCAATGACAATCCACC
 AAGCTTCTGGAGGACTCCTATTCCATCTACATACAGGAGAACAATTTGCCAGGTGTGTTGCTCTGACT
 GTGCAAGCCACAGACCCAGATGAAAAGGAGAATGCAGAGGTGACCTACTCCCTTGGAGAGGGAGATTC
 AAGGGCTGCCAGTCACCTCCTATGTCTCCATTACAGTCCAGTGGCAGCCTTTATGCTGTCAACTCCTT
 TACTATGAGAAGTTTCGGGAGTTCTTTGTGACTGTGGAGGCTCAGGACAAGGGGAGCCACCAGTACG
 AGCACTGTGACTGCCAACGTATATGTGGTGGACATGAATGACCATGCCCTCACATTCTGTACCCTACCT
 CAACCAACTCGTCAGCAGCCTTCGAGATGGTGCCTCGAAGTGCCTGCTGGCTACCTGGTACCAAAGT
 CATAGCTATGGACTCAGACTCTGGGCAAAATGCTTGGCTTTTTTACCATCTAGCCAGACTTCTGACCTG
 GACCTCTTTAAGGTAGAGCTGCACACAGGAGAAATTAGGACTACCAGGAAGATGGGAGATGAGAGTGGTA
 GCCTTTCAACCTGACCGTGGTGGTCCGAGATAATGGAGAGCCATCACTATCAGCCTCTGTGGCCATTAC
 AGTAGCTGTGGTGGATAGGGTTCCAAAATCCTCCCTGACACTCAGAGGCATGTTAAGAGCCCTCGGACA
 TACTCTGAAATTACCCTTATCTAATAATAGCATTAAAGCACAGTGTCTTTATATTTCTTTTGACAATCA
 TCATTTTGAGCATCATCAAGTGTACCGCTACACTGCGTATGGCACTGCATGCTGTGGAGGCTTCTGTGG
 AGTAAGGGAAAAGTCCCCTGCAGAACTGTACAACAAGCCAACAACAATATTGATGCCAGGATACCGCAT
 GGCTCAAAGTGCAGCCTCACTTCATTGAAGTTCGAGGGAATGGCTCCCTCACCAAGACCTACTGCTACA
 AGGCCTGTCTGACAGCAGGCTCAGGGAGTGACACTTTCATGTTTTACAATACAGGGGCCAGACAGGACC
 AGGGCCTTCGGGAGCCAAAGCAGCAGTACTGACAGCAGGAATCTCACAGGCCAAAGTGGTCAAGTGTCT
 GGGAACTGATTATTCTCAAAAATGAGGCTGTTTCTCAAATGAGGTGAGACAGTGGTCAAGGGGTCTTC
 TACAAACTCATGCATTTGTACACATCCCCAATATCCTGTGATTTGGCTTTATTGAGTCAT

ACCGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC211144 protein sequence
 Red=Cloning site Green=Tags(s)

MEQAGTRPAATEHPRLRRPMPWLLLLPLLLLLLLLLPGPAASQLRYSVPPEEQAPGALVGNVARALGLELR
 RLGPGCLRINHLGAPSPRYLELDLTSALFVNERIDREALCEQRPRCLLSLEVLAHNPVAVSAVEVEILD
 INDNSPRFPRPNYQLQVSESVAPGARFHIESAQDPDVGANSVQTYELSPSEHFELDKPLQENSKVLELV
 LRKGLDREQAALHHLVLTAVDGGIPARSGTAQISVRVLDTNDNSPAFDQSTYRVQLREDSPPGTLVVKLN
 ASDPDEGSNGELRYSLSYTSDRERQLFSIDASTGEVRYIGGLDYEEASSYQIYVQATDRGPVPMAGHCK
 VLVDIVDVNDNAPEVVLTDLYSPVENATPNTIVAVLSVNDQDSGPNRKVSLGLEATLPFRNLNGFGNSYT
 LVVSGPLDRERVAVYNITVTATDGGIPQLTSLRTLKVEISDINDNPPSFLEDSYSIYIQENNLPGVLLCT
 VQATDPDEKENAEVTYSLLEREIQGLPVTYSVINSASGSLYAVNSFDYEKFFREFFVTVEAQDKGSPPLS
 STVTANVYVMDMNDHAPHILYPTSTNSSAAFEMVPRTPAPAGYLVTKVIAMSDSGQNAWLFYHLAQTSDL
 DLFKVELHTGEIRTRTRKMGDESGSTFNLTVVVRDNGEPLSASVAITVAVVDRVSKILPDTQRHVKSPT
 YSEITLYLIIALSTVSFIFLLTIIILSIIKCYRYTAYGTACGGFCGVRERSPAELYKQANNIDARIPH
 GLKVQPHFIEVRNGSLTKTYCYKACLTAGSGSDTFMFYNTGAQTGPGPSGAQAAVTDSRNLTGQSGQNA
 GNLIIILKNEAVSQNEVRQWSGGLLQTHAFVTHPPISCDLALLSH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6590_f03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



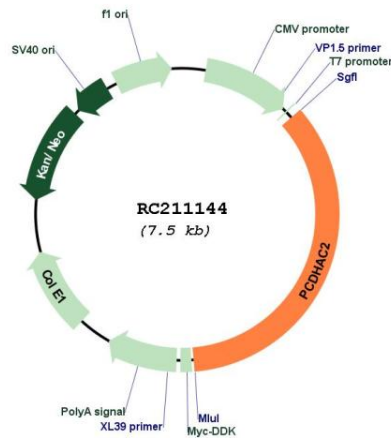
* The last codon before the Stop codon of the ORF

ACCN:	NM_031883
ORF Size:	2652 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_031883.1
RefSeq Size:	2655 bp
RefSeq ORF:	2655 bp
Locus ID:	56134
UniProt ID:	Q9Y5I4
Cytogenetics:	5q31.3
Domains:	CA
Protein Families:	Transmembrane
MW:	96.2 kDa

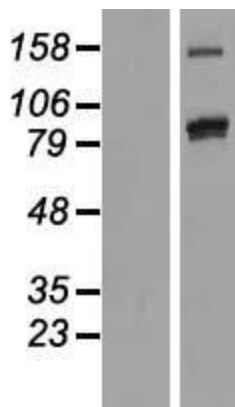
Gene Summary:

This gene is a member of the protocadherin alpha gene cluster, one of three related gene clusters tandemly linked on chromosome five that demonstrate an unusual genomic organization similar to that of B-cell and T-cell receptor gene clusters. The alpha gene cluster is composed of 15 cadherin superfamily genes related to the mouse CNR genes and consists of 13 highly similar and 2 more distantly related coding sequences. The tandem array of 15 N-terminal exons, or variable exons, are followed by downstream C-terminal exons, or constant exons, which are shared by all genes in the cluster. The large, uninterrupted N-terminal exons each encode six cadherin ectodomains while the C-terminal exons encode the cytoplasmic domain. These neural cadherin-like cell adhesion proteins are integral plasma membrane proteins that most likely play a critical role in the establishment and function of specific cell-cell connections in the brain. Alternative splicing has been observed and additional variants have been suggested but their full-length nature has yet to be determined. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC211144



Western blot validation of overexpression lysate (Cat# [LY410472]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211144 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).