

Product datasheet for **SC110560**

PCDHAC2 (NM_031883) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PCDHAC2 (NM_031883) Human Untagged Clone
Tag:	Tag Free
Symbol:	PCDHAC2
Synonyms:	PCDH-ALPHA-C2
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None



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Fully Sequenced ORF: >NCBI ORF sequence for NM_031883, the custom clone sequence may differ by one or more nucleotides

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ATGGAGCAGGCGGGCACCAGACCTGCGGCGACAGAGCATCCACGGCTCCGGCGGCCCATGCCTGGCTGC
TGCTACTGCCTCTCCTGCTGCTGTTGCTGCTGCTGCTACCTGCCCTCGCGCCTCCCAGCTGCGATACTC
TGTGCCAGAGGAGCAGGCACCCGCGCGCTCGTGGGCAACGTGGCTCGCGCGCTGGGGCTTGAGCTGCGG
CGCTTGGGGCCGGTTGCTTGCATCAACCATCTGGGTGCGCCAGTCCGCGCTACCTGGAGCTGAGACC
TGACGAGTGGAGCGCTCTTCGTCAACGAGCGCATTGATCGGGAGGCGCTGTGTGAGCAGCGGCTCGCTG
CCTGCTCAGTTGGAAGTGTGGCGCACAAACCCGTGGCGGTGAGCGCCGTTGAGGTGAAATATTGGAC
ATCAACGACAACCTACCGCGTTTCCCGCGGCCAACTACCAGTTCAGGTAAGCGAATCGGTGGCGCCTG
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CAGCCCCAGCGAGCACTTCGAGCTGGACCTTAAGCCCTGCAGGAGAACAGTAAAGTGTGAGCTGGT
CTGCGTAAGGGCCTAGACCGGGAGCAGGCAGCCTTGACCCACTGGTTCTCACAGCCGTGGATGGGGCA
TCCAGCCGCTCGGGTACGGCACAGATCTCTGTGCGTGTCTGGACACTAACGACAACCTCCTGCCTT
TGACCAGTCCACTTATCGCGTCCAGTACGGGAGGACTCACCCCAAGGCACATTGGTGGTGAAGTGAAT
GCCTCAGACCCGGATGAGGGCTCCAATGGTGTGAGCTCAGGTAACCTTGGAGAGCTACACGTCGGACCGGG
AGAGGCAGCTCTTCAGCATAGATGCCAGTACCGGGGAAGTGCAGTAATTGGGGGCTGGATTATGAGGA
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CTGGTGGTGGAGCGCCACTGGACCGAGAGCGGGTGGCTGTCTACAACATCACGGTACAGCCACAGATG
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TGACTATGAGAAGTTTCGGGAGTTCTTTGTGACTGTGGAGGCTCAGGACAAGGGGAGCCACCAGTGA
AGCACTGTGACTGCCAACGTATATGTGGTGGACATGAATGACCATGCCCCCACATTCTGTACCCTACCT
CAACCAACTCGTCAGCAGCCTTCGAGATGGTGCCTCGAACTGCCCTGCTGGCTACCTGGTACCAAAGT
CATAGCTATGGACTCAGACTCTGGGCAAAATGCTTGGCTTTTTTACCATCTAGCCAGACTTCTGACCTG
GACCTCTTTAAGGTAGAGCTGCACACAGGAGAAATTAGGACTACCAGGAAGATGGGAGATGAGAGTGGTA
GCCTTTCAACCTGACCGTGGTGGTCCGAGATAATGGAGAGCCATCACTATCAGCCTCTGTGGCCATTAC
AGTAGCTGTGGTGGATAGGGTTTCCAAAATCCTCCCTGACACTCAGAGGCATGTTAAGAGCCCTCGGACA
TACTCTGAAATTACCCTTTATCTAATAATAGCATTAAAGCACAGTGTCTTTTATATTTCTTTTGACAAATCA
TCATTTTGAGCATCATCAAGTGTACCGCTACACTGCGTATGGCACTGCATGCTGTGGAGGCTTCTGTGG
AGTAAGGGAAAGGTCCCCTGCAGAACTGTACAACAAGCCAACAACAATATTGATGCCAGGATACCGCAT
GGCCTCAAAGTGCAGCCTCACTTCAATGAAGTTCGAGGGAATGGCTCCCTCACCAGACCTACTGCTACA
AGGCCTGTCTGACAGCAGGCTCAGGGAGTGACACTTTCATGTTTTACAATACAGGGGCCACAGCAGGACC
AGGGCCTTCGGGAGCCCAAGCAGCAGTACTGACAGCAGGAATCTCACAGGCCAAAGTGGTCAAGATGCT
GGGAACCTGATTATTCTCAAAAATGAGGCTGTTTCTCAAAATGAGGTGAGACAGTGGTCAAGGGGCTTTC
TACAAACTCATGCATTTGTACACATCCCCCAATATCCTGTGATTTGGCTTTATTGAGTCATTAA
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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_031883 unedited TTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCGCCGCGGCCAGTG GCTATGGAGCAGGCGGGCACCAGACCTGCGGCGACAGAGCATCCACGGCTCCGGCGGCC ATGCCCTGGTGTGCTACTGCCTCTCCTGCTGCTGTTGCTGCTGCTGCTACCTGGCCCT GCGGCCTCCCAGCTGCGATACTGTGCCAGAGGAGCAGGCACCCGGCGCGCTCGTGGGC AACGTGGCTCGCGCGCTGGGGCTTGAGCTGCGGCGCTTGGGGCCGGTTGCTTGGCAGC AACCATCTGGGTGCGCCAGTCCGCGCTACCTGGAGCTGGACCTGACGAGTGGAGCGCTC TTCGTCAACGAGCGCATTGATCGGGAGGCGCTGTGTGAGCAGCGCCTCGCTGCCTGCTC AGCTTGGAAAGTGTGGCCACAACCCCGTGGCGGTGAGCGCCGTTGAGGTGGAATATTG GACATCAACGACAACCTACCCGCTTTCCCGCGGCCAACCTACCAGCTTCAGGTAAGCGAA TCGGTGGCGCCTGGAGCGCGCTTTCACATAGAGAGTGCAGGACCCCGACGTGGGCGCC AACTCAGTACAGACCTACGAGCTCAGCCCCAGCGAGCACTTCGAGCTGGACCTTAAGCCC CTGCANGAGAACAGTAAAGTGTGAGCTGGTGTGCGTAAGGGCCTANNACCGGAGCAG GCAGCCTTGACACCTGTTTCTCACAGCCGTGGATGGGGGCATCCAGCCCGCTCGGGT ACCGCACAGATCTGTGCGGTGCTGACACTAACGACAACCTCCTGCCTTTGACCAG TCCACTTATCGCGTCCAGCTACGGGAGGACTCACCCCCAG</p>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_031883 unedited CTATGGAACGCGGCACGCAATCTAGGATCGAGTTTTTTTTTTTTTTTTTTTCTTGGTCTCC TCCTTTTTGCCGAAGTTATGAAGTCACTTTTGTCAATTTGGCTGTTAGTAGGCTCCTGCC GGATGGAGATGATTGCAGGAGATCCTGGGATAATGAATTTGTCGGCAACTCACCCGGAC CGGATTGTTTGGGGTTGCTGGTCCGATTTAAAGGTCCAGCTGTTGCTGTTGACACCCG CACCGACTGGAGGGGACACTTCTCCTGCCTCTGGTTCTGGTGTGCACTGGATACTGTTG GCCACTGCTGATCAGGCCCTCCTGGACCAGCCCGTAAAATGCCAGCCTCCTCTAGGTGCA CAGAGCTGTGCATGCCTGCTCTCAGGGAGGCAGAGTAACGCCAGTCAGGGTTGGGCTGTC GTGGCTCATTTTGGAAACAGCCTCATTTTTGAGAATAATCAGGTTCCCAGCATTCTGAC CACTTTGGCCTGTGAGATTCTGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG GTCCTGTCTGGGCCCCTGATTTGTAACATGAAAGTGTCACTCCCTGAGCCTGCTGTCA GACAGGCCCTGTAGCAGTAGGCTTGGTGAGGGAGCCATCCCTCGAAGTCAATGAAGT GAGGCTGCACTTTGAGGCCATGCGGTATCCTGGCATCAATATTGTTGTTGGCTTGTGTTG ACAGTTCTGCAGGGGACCTTTCCCTTACTCCACAGAAGCCTTACAGCATGCAATGCCAT ACGCAGTGTANCGGTAGCACTTGTGATGCTCAAATGATGATTGTCAAAAAGATATANAG ACACTGTGCTTATGCTATTATTAGATAGGGTATTTANAGTTGTCCGAGGGCTCTTACAT GCCTCTGATGTCAGGNAGATTTTGAACCTTTCCACCCANTACTGTATGGCCACAGAGCT GTANTGATGGCTCCATATT</p>
Restriction Sites:	NotI-NotI
ACCN:	NM_031883
Insert Size:	3500 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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.

RefSeq: [NM_031883.2](#), [NP_114089.1](#)

RefSeq Size: 2655 bp

RefSeq ORF: 2655 bp

Locus ID: 56134

UniProt ID: [Q9Y5I4](#)

Cytogenetics: 5q31.3

Domains: CA

Protein Families: Transmembrane

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]

Transcript Variant: This variant (2) utilizes the large, first exon then continues into the downstream intron 1 sequence before terminating. This one-exon transcript encodes a shorter isoform (2), compared to variant 1. This short variant is represented based on data in PMID:10380929.