

Product datasheet for **SC110571**

PCDHA4 (NM_031500) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PCDHA4 (NM_031500) Human Untagged Clone
Tag:	Tag Free
Symbol:	PCDHA4
Synonyms:	CNR1; CNRN1; CRNR1; PCDH-ALPHA4
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

Fully Sequenced ORF: >NCBI ORF sequence for NM_031500, the custom clone sequence may differ by one or more nucleotides

```
ATGGAGTTTTCTGGGAAGCGGCCAGGAATCCCGGCGTCTGCTGCTTACTTCTTCTCCTCGCAGCCT
GGGAGGCAGGGAACGGTCACTCCACTACTCGGTCTCCGAGGAGGCCAAACACGGCACCTTCGTGGGCCG
CATCGCGCAGGACCTGGGACTGGAGCTGGCGGAGCTGGTGCCGCGCCTGTTCCGGGTGGCGTCCAAGGGC
CGCGGAGGCCTTCTGGAGGTAAATCTGCAGAATGGCATTGTTGTTGTGAATTCTCGGATCGACCGGGAGG
AGCTGTGCCGGCGGAGCGCGGAGTGCAGCATCCACCTGGAGGTGATCGTAGACAGGCCGCTGCAGGTTTT
CCATGTGGACGTGGAGGTGAGGGACATTAACGATAAACCAGCGGTGTTCCAGCAACACAAAAGAACCTG
TCCATCGCGGAATCCAGGCCGCTTGACTCTCGGTTTCCACTAGAGGGCGCCTCGGATGCAGATATCGGGG
AGAACGCCCTGCTCACTTACAGACTGAGCCAAATGAATACTTTTCTCTGGAAAAACCACCTGATGACGA
GCTGGTAAAAGGTCTTGGGCTTATATTACGAAATCTTTAGACAGAGAAGAAGCTCCGGAGATTTTTTTA
GTGCTCACAGCCACTGATGGAGGCAAACCCGAGTTGACTGGCACCCTCAGTTACTCATCAGTACTGG
ATGCCAATGACAATGCCCGAGTTTTGACAGAACCATTTATAAGGTGAGATTACTAGAAAATGTTCTTAA
TGGAACATTGGTAATTAACCTAACGCCTCAGATTTAGACGAAGGATTGAATGGGGACATTGTTTATTCA
TTCTCAAATGATATTTCCGCAAATGTGAAATCCAAGTTTACATAGATCCAATTACTGGACAAATATTG
TAAAGGGATATATTGACTTTGAAGAAAGCAAATCCTATGAAATATTGTAGAGGGCATTGATAAGGGACA
GCTCCCACTTTCTGGCCATTGTAGAGTTATTGTGGAAGTAGAAGACAACAACGATAATGTCCAGATTTG
GAATTCAGTCTTTATCACTTCCAATTAGAGAGGACGCTCCACTGGGTACAGTCAATCGCCCTGATCAGCG
TGTCCGACAAAGACATGGGTGTCAATGGGCTGGTCACTGCTCCTTGACGTCCACGTCCCTTCAAGCT
GGTGTCCACCTTCAAGAATTACTACTCGTTGGTGTGGACAGTGCCTGGACCGGAGAGCGTGTGACGCC
TATGAGCTGGTGGTGACCGCGGAGACGGGGCTCGCCTTGGCTGTGGCCACGGCCAGTGTTCGTGG
AGGTGGCTGATGTGAACGACAACGCTCCGGCGTTCGCGCAGCCGAGTACACAGTGTTCGTGAAGGAGAA
CAACCCGCGGGCTGCCACATCTTCACTGTGTCTGCGTGGGACGCGGACGCGCAGGAGAACGCGCTGGT
TCTACTCGTGGTAGAGCGCGGGTAGGGGAGCGCGCTGTCGAGTACGTTTCGGTGCATGCGGAGA
GCGGCAAGGTGTACGCGCTGCAGCCGCTGGACCAGAGGAGCTAGAGTGTGTCAGTTTCAGGTGACCGC
TCGCGATGCCGGCTGCCACCTTGGGCAGCAACGTGACGCTGCAGGTGTTGCTGCTGGACGAAAACGAC
AACCGCCAGCACTGCTAGCGCTCGGGCGGGTGGCACTGGTGGCGCAGTGAAGGAGTGGTGCATGGT
CGGTGGGTGTGGCCACGTGGTGGCAAAGTGCAGCGGGTGGATGCTGACTCGGGCTACAACGCGTGGCT
TTCGTACGAGCTGCAGCCGGGACTGGTGGCGCGCATCCCGTTCGCGTGGGGCTGTACTGCGCGAG
ATCAGCACAACGCGTCCCTGGACGAAACGGACGCTCCGCGCACCGCCTACTGGTACTGGTGAAGGACC
ACGGCGAGCCCGCTGACGGCCACGGCCACTGTGCTGGTGTCACTTGTGGAGAGTGGACAGGCGCCAAA
GGCCTCCTCACGGGCGTTGGTGGGCGCTGTGGTCCCAGTGTGCGCTGGTGGATGTCAACGTATACCTG
ATCATTGCCATCTGCGCGGTGTCCAGCCTTTGGTGTGCTCAGCTGCTGTACACCGCGCTGCGGTGCT
CTGCGTGTCCACCGAGGGCGCTGCGCTCCGGCAAGCCACGCTGGTGTGCTCCAGTGCAGTGGGGAG
CTGGTCACTCGCAGCAGAGGAGGCGGAGGTGTGCTGCTGGTGGGGCCACCAAGACCGACCTCATG
GCCTTACGCCCCAGTTTACCTGACTCTAGGACAGAGAAGATCAGCTGCAGACAACCTGAGGAATCCTTTG
CAAAGTTAGTGTATAA
```

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_031500 unedited
 GTTGTTCAAATTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGCACGAGAGACT
 GAATATGGAGGATGCAGCTGCACCTTGACTGACCGATTAAGATTTCCCTTGACTTTGAG
 AAACGATATTTAATCAGAACAAAATACTGTGACTAAAGATGGAGTTTTCTGGGGAAGC
 GGCCAGGAATCCCGGCGTCTGCTGCTTACTTCTTCTCCTCGCAGCCTGGGAGGCAGGG
 AACGGTCAGCTCCACTACTCGGTCTCCGAGGAGCCAAACACGGCACCTTCGTGGGCCGC
 ATCGCGCAGGACCTGGGACTGGATCTGGCGGAGCTGGTGCCGCGCCTGTTCCGGGTGGCG
 TCCAAAAGACACCGGGACCTTCTGGAGGTAATCTGCAGAATGGCATTGTTTGTGAAT
 TCTCGGATCGACCGGAGGAGCTGTGCCGGCGAGCGCGAGTGACGATCCACCTGGAG
 GTGATCGTGGACAGGCCCTGCAGGTTTTCCATGTGGACGTGGAGGTGAGGGACATTAAC
 GATAACCCGCGGTGTTCCAGCAACACAAAAGAACCTGTCCATCGCGGAATCCAGGCCG
 CTTGACTCTCGGTTTCCACTAGAGGGCGCCTCGGATGCAGATATCGNGAGAACGCCCTG
 CTCACTTACAGACTGAGCCAAATGAATACTTTTCTGCGAAAACCATCTGATGACGAG
 CTGGTAAAAGTCTTGGGCTTATATTACGAAAATCTTTAGACAGAGAAGAAGCTCCGGAG
 ATTTTTTGTAGTGCTCACAGCCACTGATGGAGGCAACCCGAGTTGACTGGCCCCGTTTCAG
 TTAATCATCACAGAACTGGATGCCAATGACAATGCCCCACTTTTGACAGAACATTTTTA

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_031500 unedited
 CCGCGGCCCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTTCTTGGTCTCCTCTTTTT
 GCCGAAGTTATGAAGTCACTTTTGTCAATTTGGCTGTTAGTAGGCTCCTGCCGATGGA
 GATGATTGCAGGAGATCCTGGGATAATGAATTTGTCGGGCAACTACCGGGACCGGATTG
 TTTGGGTTGCCGCTGATTTAAAGTCCAGCTGTTGCTGTTGACACCCGCACCGAC
 TGGAGGGGACACTTCTCCTGCCTCTGGTCTGGTGTGACTGGATACTGTTGGCCACTG
 CTGATCAGGCCCTCCTGGACCAGCCGTAGAATGCCAGCCTCCTTAGGTGCACAGAGCT
 GTGCATGCCTGCTCTCAGGGAGGCAGAGTAACGCCAGTCAGGGTTGGGCTGTCGTGGCTT
 TGCAAAGGATTCCTCAGTTGTCTGCAGCTGATCTTCTGTCCTAGAGTCAGGTAAGT
 GGGGCTGAAGGCCATGAGGTCGGTCTTGGGTGGGCCCTCACCAGAGCACACCCTCGGCT
 CCTCTGCTGCGAGATGACCAGTCCCCACCGCACTGGAGCACACCAGCGTGGGCTTGGC
 CGGAGCGCACGCCCTCGGTGGGCGAGCAGAGCACCGCAGCGCGGTGTACAGCAGCAG
 CGTGAGCACAAAAGGCTGGACACCGCGCAGATGGCAATGATCAGGTATACGTTGACATC
 CACCAGCGCAGCATCGGGACCCACAGCGCCACCAACGCCCGTGAGGAGGCCTTTGGCGC
 CTGTCCACTCTTACAGTGACACCAGCACAGTGGCCGTGCCCGTCATCGCGGCCTCGCCG
 TGGTCTTACAGTACCATTAGCCGTGGCGCCGAACGTCCGTTTTCGTCCAGGCAGCGTTG
 TGCTGATCTCGCAGTGTACACCCAGCGTACGGGTG

Restriction Sites:

NotI-NotI

ACCN:

NM_031500

Insert Size:

2870 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_031500.1](#), [NP_113688.1](#)

RefSeq Size: 2498 bp

RefSeq ORF: 2397 bp

Locus ID: 56144

UniProt ID: [Q9UN74](#)

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 isoform 1. This short variant is represented based on data in PMID:10380929.