

Product datasheet for **SC106781**

PCDHGA2 (NM_032009) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PCDHGA2 (NM_032009) Human Untagged Clone
Tag:	Tag Free
Symbol:	PCDHGA2
Synonyms:	PCDH-GAMMA-A2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >SC106781 representing NM_032009.
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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ATGGCGGCTCTGCAAAAGTTGCCACACTGCAGAAAGCTGGTCTGCTGTGCTTCCTTTGGCGACCCTG
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_032009 unedited
 GTCAAATTTTGTATACGACTCACTATAGCGGCCGCGAATTCGCACCAGCCCAGCACAAG
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 GGACGTGCGAAGGGGAGCTGATGGGAACAGTACCAGAAGTGGGTGCTGACGCTCTCTGGA
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3' Read Nucleotide Sequence:

>OriGene 3' read for NM_032009 unedited
 NNNTTCCTCGGTGNACCCGGCCGATTCTANGATCGGTTTTTTTTTTTTTTTTTTTTTTT
 TGAAAACAGCCATATTTATACATTATTTCTTTAAGTTTGTCTTGGTGACCTGATAAC
 TTAGTTTCGATATTTGTTGTTATTTAATATTCATTAAACAAACACATAATTAGGCATCAG
 ACAATATGTTTGGGATTAAAGGTGAACAATATAGACACAGTAGCTTCCTTCACAGAGAT
 TATAAGGATATAAAGCAAAACAGGGAATTGCAGTGTACTGAGATAATTACCATAATGGGA
 GAAGCCAAGGGGGTTAGGGGGGCTTCAATTGGGCCTTTAATGTTAGCAAACGCTTCCC
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 CCTTCTCCACCCCCCTACTCTTACCTTTTAACCTCTTCCACCACTCACCTATTGCGCTC
 CATATCCCCCTCTCCCCCGCCTCCTCATCCCCCTCTCACACTCTCGGCCCTCTCTCAC
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 AGTTATCTATTACTCGCGCGCGCTTCCCTACCCGCTCCCTTCGTTCTCCTTCTCATTAC
 TCCCGCGCCACGGACGCACCCCTATACCCTGCCAATTACGAAAACATATTCCATATCGC
 CGCTCTCTCTTTTTTCCCTTCACTCTTCTGCTCCCACTACCCTTTCTTGCTCATTTC
 TCTCCACCACTTACCACTTCCCCATTN

Restriction Sites:

NotI-NotI

ACCN:

NM_032009

Insert Size:

2472 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_032009.1](#)

RefSeq Size: 2657 bp

RefSeq ORF: 2472 bp

Locus ID: 56113

UniProt ID: [Q9Y5H1](#)

Cytogenetics: 5q31.3

Domains: CA

Protein Families: Transmembrane

MW: 90.3 kDa

Gene Summary: 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]

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 the shorter isoform (2). This short variant is represented based on data in PMID:10380929.