

Product datasheet for SC310676

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PCDHGC3 (NM_032403) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: PCDHGC3 (NM_032403) Human Untagged Clone

Tag: Tag Free
Symbol: PCDHGC3

Synonyms: PC43; PCDH-GAMMA-C3; PCDH2

Vector: pCMV6 series

Fully Sequenced ORF: >NCBI ORF sequence for NM_032403, the custom clone sequence may differ by one or more

nucleotides

CCCAGCAGGTGGCAATGGCAACAAGAAGAAGTCGGGCAAGAAGAAGAAGTAA

Restriction Sites: Please inquire ACCN: NM 032403

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts

of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at customercom or by

calling 301.340.3188 option 3 for pricing and delivery.

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



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OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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: <u>NM 032403.1</u>, <u>NP 115779.1</u>

RefSeq Size: 2326 bp
RefSeq ORF: 405 bp
Locus ID: 5098
Cytogenetics: 5q31.3

Protein Families: Transmembrane

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 immunoglobulinlike 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 7 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 (3) utilizes an alternative splice donor site that truncates exon

1. This shortest isoform (3) contains no cadherin domains and lacks a signal sequence and transmembrane region. The functional significance of this isoform is unknown but the

transcript is well represented in the EST database.