

Product datasheet for RC211429

PCDHGC3 (NM_032403) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: PCDHGC3 (NM_032403) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: PCDHGC3
Synonyms: PC43; PCDH-GAMMA-C3; PCDH2
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC211429 representing NM_032403
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGTCCCAGAGGCTGGAGGAGCGGACTGCAAGCCCCGCCAACACGGACTGGCGTTTCTCTCAGGCC
AGAGACCCGGCACCAGCGGCTCCAAAAATGGCGATGACACCGGCACCTGGCCCAACAACAGTTTGACAC
AGAGATGCTGCAAGCCATGATCTTGGCGTCCGCCAGTGAAGCTGCTGATGGGAGCTCCACCTGGGAGGG
GGTGCCGGCACCATGGGATTGAGCGCCCGCTACGGACCCAGTTCACCCTGCAGCAGTGCCTGACTACC
GCCAGAATGTCTACATCCAGGCAGCAATGCCACACTGACCAACGCAGCTGGCAAGCGGGATGGCAAGGC
CCCAGCAGGTGGCAATGGCAACAAGAAGAAGTCGGGCAAGAAGGAGAAGAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC211429 representing NM_032403
Red=Cloning site Green=Tags(s)
MVPEAWRSLQAPPNTDWRFSQAQRPGTSGSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGG
GAGTMGLSARYGPQFTLQHVDPYRQNVYIPGSNATLTNAAGKRDGKAPAGGNGNKKKSGKKEK

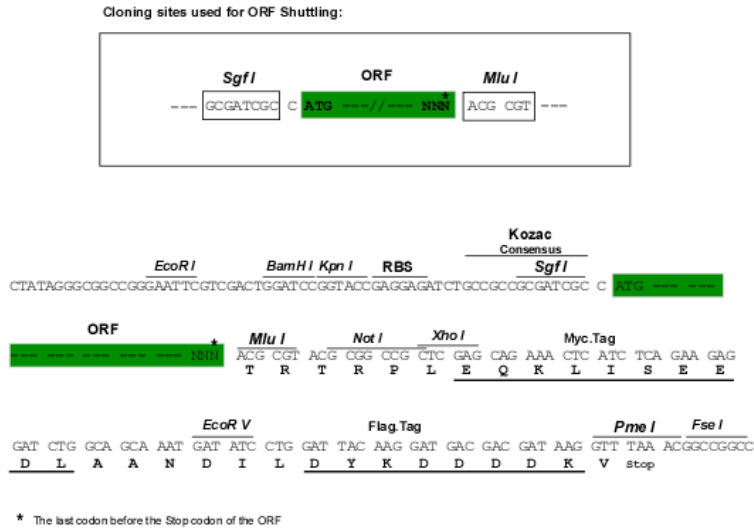
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

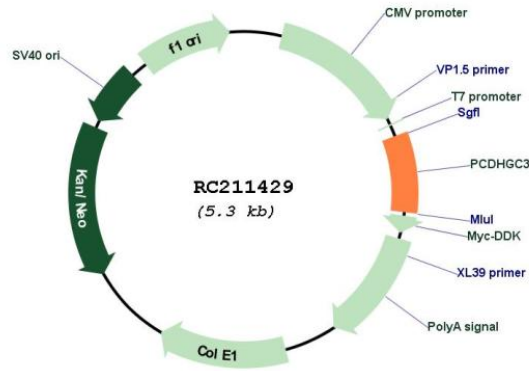


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Cloning Scheme:



Plasmid Map:



ACCN: NM_032403

ORF Size: 402 bp

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 custsupport@origene.com 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](#)

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:

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_032403.3](#)

RefSeq Size: 2326 bp

RefSeq ORF: 405 bp

Locus ID: 5098

Cytogenetics: 5q31.3

Protein Families: Transmembrane

MW: 13.9 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]