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Product datasheet for RC219924

PCDHGB4 (NM_003736) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PCDHGB4 (NM_003736) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PCDHGB4
Synonyms:	CDH20; FIB2; PCDH-GAMMA-B4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC219924 representing NM_003736
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

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GAGAAGCCTTACTTCACCGTGAGCGCAGAGAGCGGGGAGTTGCTTGTGAGCAGCAGGCTAGACAGGGAGG
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC219924 representing NM_003736
Red=Cloning site Green=Tags(s)

MGSGAGELGRAERLPVLFLFLLSLFCPALCEQIRYRIPEEMPKGSVVGNLATDLGFSVQELPTRKLRVSS
EKPYFTVSAESGELLVSSRLDREEICGKKPACALEFEAVAENPLNFYHVNVEIEDINDHTPKFTQNSFEL
QISESAQPGTRFILGSAHDADIGSNTLQNYQLSPSDHFSLINKEKSDGSKYPEMVLKTPLDREKQKSYHL
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FSEASQITQFDLNSNTGEITVLNTLDFEEVKEYSIVLEARDGGGMIAQCTVEVEVIDENDNAPEVIFQSL
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FLVAMILAIALRLRRSSSPASWSCFQPGLCVKSESVVPPNYSEGTLPYSYNLCVAHTGKTEFNFLKCSEQ
LSSGQDILCGDSSGALFPLCNSSELTSHQQAPPNTDWRFSQAQRPGTSGSQNGDDTGTWPNNQFDTEMLQ
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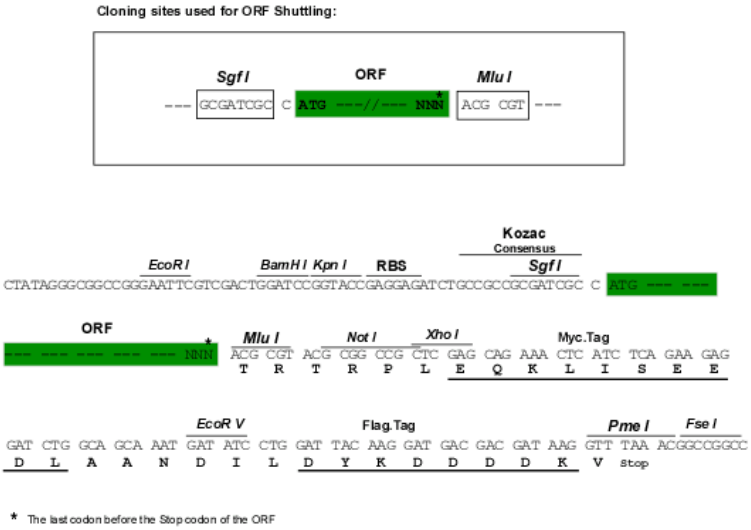
NGNKKKSGKKEKK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6596_e08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



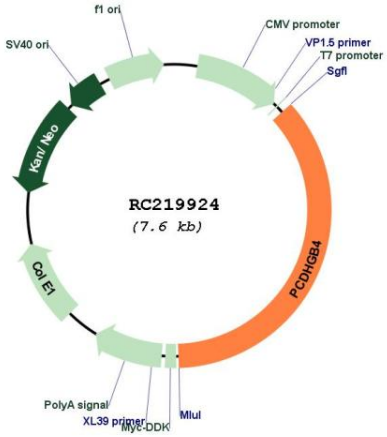
ACCN: NM_003736

ORF Size: 2769 bp

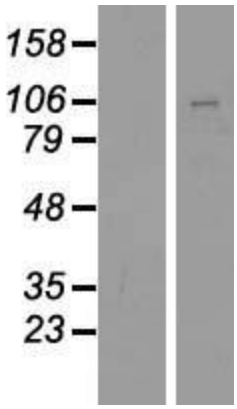
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_003736.4
RefSeq Size:	4578 bp
RefSeq ORF:	2772 bp
Locus ID:	8641
UniProt ID:	Q9UN71
Cytogenetics:	5q31.3
Domains:	CA
MW:	99.93 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. This particular family member is expressed in fibroblasts and is thought to play a role in wound healing in response to injury. Alternative splicing has been described for the gamma cluster genes. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC219924



Western blot validation of overexpression lysate (Cat# [LY418461]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219924 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).