

Product datasheet for **RC220977**

PCDHA9 (NM_014005) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PCDHA9 (NM_014005) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PCDHA9
Synonyms:	PCDH-ALPHA9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC220977 representing NM_014005
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTTATACTCAAGTCGAGGAGATCCAGAGGGTACGCTCTACTGCTCTCGTTCTGATCCTCGCAATGT
 GGGTGGTGGGAGCGGCCAGCTCCACTACTCCGTCGCCGAGGAAGCCGAACACGGCACCTTCGTGGGCCG
 CATCGCGCAGGACCTGGGGCTGGAGCTGGCGGAGCTGGTCCGCGCCTGTTCCAGTTGGATTCCAAGGC
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 AGCTGTGCGGGCGGAGCGGAGTGCAGCATCCACCTGGAGGTGATCGTAGACAGGCCGCTGCAGGTTTT
 CCATGTGGACGTGGAGGTGAAGGACATTAACGACAACCCTCCAGTGTCCAGCGACACAAAAGAATCTG
 TTCATCGCGGAATCCAGGCCGCTGACTCTCGGTTTCCACTAGAGGGCGCGTCCGATGCAGATATCGGGG
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 GCAGGTAACCTCTTGGACTTGTATTACGAAACTTTTAGACAGAGAAGAACTCCGGAGCTTCATTTA
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 GCGCGACGCGGGCTGCCGCTTGGGCAGCAACGTGACGCTGCAGGTGTTCTGTGCTGGACGAGAACGAC
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 CGGCGATGCCACCGAGGGCGAGTGCAGCCTGGCAAGCCGACGCTGGTGTGTTCTAGCGGTGGGGAG
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 ATAAAG

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC220977 representing NM_014005
 Red=Cloning site Green=Tags(s)

MLYSSRGDPEGQPLLLSLLILAMWVVGSGQLHYSVPPEAEHGTFVGRIAQDLGLELAELVPRLFQLDSKG
 RGDLLVNLQNGILFVNSRIDREELCGRSAECSIHLEVI VDRPLQVFHVDVEVKDINDNPPVFPATQKNL
 FIAESRPLDSRFPLEGASDADIGENALLTYRLSPNEYFFLDVPTSNQQVKPLGLVLRKLLDREETPELHL
 LLTATDGGKPELGTGVQLLITVLDNNDNAPVFDRTLYTVKLPENVSIGTLVIHPNASDLDEGLNGDIIYS
 FSSDVSPDIKSKFHMDPLSGAITVIGHMDFEESRAHKIPVEAVDKGFPLAGHCTLLVEVVDVNDNAPQL
 TIKTLSVPVKEDAQLGTVIALISVIDLDADANGQVTCSLTPHVPFKLVSTYKNYYSLVLDRALDRESVSA
 YELVVTARDGGSPSLWATARVSVVADVNDNAPAFQSEYTVFVKENPPGCHIFTVSARDADAQENALV
 SYSLVERRLGERLSSYVSVHAESGKVYALQPLDHEELELLQFQVSARDAGVPPPLGSNVTLQVFLDEND
 NAPALLTPMRGTDGAVSEMVLRSVAGVVGKVRVAVDADSGYNWL SYELQPETASASIPFRVGLYTGE
 ISTTRALDETAPRQLLVVKDHGEPALTATATVLSLVESGQAPKSSSRASVGTGPEVTLVDVNVYL
 IIAICAVSLLVLTLLTYVLRCSAMPTEGECAPGKPTLVCSAVGSWSYSQRRQRVCSGEGKQKTDLM
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 IK

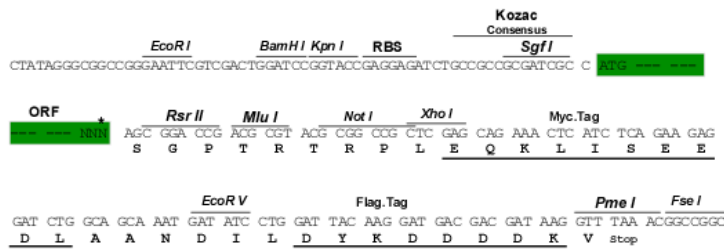
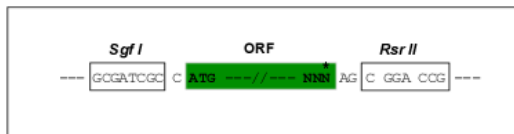
SGPTRRRLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8008_g12.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



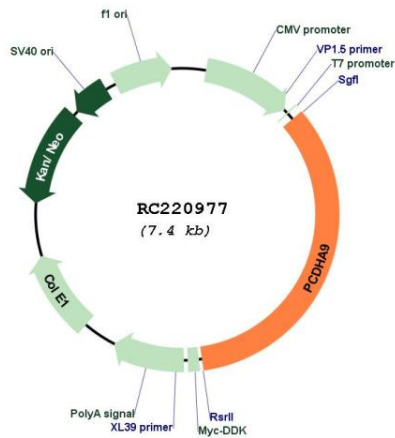
* The last codon before the Stop codon of the ORF

ACCN:	NM_014005
ORF Size:	2526 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:	<ol style="list-style-type: none">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_014005.4 , NP_054724.1
RefSeq Size:	6388 bp
RefSeq ORF:	2529 bp
Locus ID:	9752
UniProt ID:	Q9Y5H5
Cytogenetics:	5q31.3
Domains:	CA
Protein Families:	Druggable Genome, Transmembrane
MW:	91.3 kDa

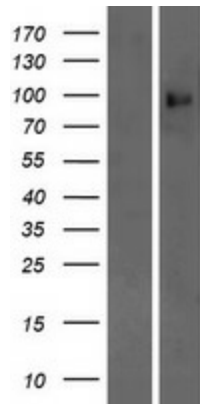
Gene Summary:

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]

Product images:



Circular map for RC220977



Western blot validation of overexpression lysate (Cat# [LY415536]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220977 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).