

Product datasheet for **RC224403**

PCDHA12 (NM_031864) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	PCDHA12
Synonyms:	PCDH-ALPHA12
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



ORF Nucleotide Sequence: >RC224403 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTGATTATCGGACCAAGAGGCCGGGATCCAGCGTCTGCTGCTCTCGCTTCTGCTCCTTGACGCT
GGGAGGTGGGAGCGGCCAGCTCCACTACTCCGTCTACGAGGAGGCCAAACACGGCACCTTCGTGGGCCG
CATCGCTCAGGACCTGGGGCTGGAGCTGGCGGAGCTGGTGCCGCGCCTGTTCCGGGTGGCGTCCAAAAGA
CACGGGGACCTTCTGGAGGTAATCTGCAGAAATGGCATTGTTTGTGTAATCTCGGATCGACCGCGAGA
AGCTGTGCGGGCGGAGCGGGAGTGCAGTATCCACCTGGAGGTGATCGTGGACAGGCCGCTGCAGGTTTT
CCATGTGGACGTGGAGGTGAAGGACATTAACGACAACCGCCGGTTCAGAGAAAGGGAACAAAAGTA
CCTGTTTCTGAATCTGCGCTCTGACTCTCATTTCTCTAGAGGGCGCTTCTGATGCGGATATCGGCG
TAAACTCTCTTTGACCTATGCGTTAAGTCTAAATGAGAATTTGAGCTTAAATAAAAAACAAAAAAGA
TAAAGTATATTGCCTGAATTAGTTCTTCGGAAGTTATTGGACAGAGAGCAACGCCAAAACCTCAATTTA
TTGCTGATGGTAATCGATGGCGGTAAACCAGAACTAACAGGGTCTGTCCAGATTCAAATAACCGTCTCGG
ATGTGAATGACAATGGTCCGGCGTTTGATAAGCCAGCTATAAAGTAGTGTGCTGAAAATGTCCAAAA
CGACACAAGAGTGATCCAACTAAATGCTTCGATCCAGACGAAGGACTTAATGGAGAAATTCCTATGGG
ATCAAAATGATTTTGCCAGTGAGTGAGAAATGTATGTTTCAATAAATCCAGACACAGGTGAAATTAGAA
TTTATGGTGAACCTGGATTTTGAAGAGAATAATGCCTATGAAATTCAGGTTAACGCCATTGATAAAGGGAT
TCCTTCCATGGCAGGTACAGCATGGTCTGGTGAAGTTCTGGACGTGAATGACAATGTCCTGAAGTA
ATGGTTACTTCACTGTGCTCCCTGTGCAAGAGGATGCTCAGGTGGGTACCGTCATTGCCCTGATTAGCG
TGTCGGATCGTGACTCTGGAGCCAATGGACAGGTCATCTGCTCACTGACACCTCATGTTCCCTTCAAGCT
GGTGTCCACCTACAAGAATTACTACTCGTTGGTGTGCTGGACAGCGCCCTGGACCGCGAGAGCGTGTGCGCC
TATGAGCTGGTGGTGACTGCGCGGGATGGGGCTCGCCTTCGCTGTGGGCCACGGCTAGAGTGTCGGTG
AGGTGGCCGACGTGAACGACAATGCGCCTCGCTTCGCGCAGCCGAGTACACAGTGTTCTGTAAGGAGAA
CAACCCGCCGGGCTGCCACATCTTACGGTGTGCGCATGGGACGCGGACGCGCAGAAGAACGCGCTGGTG
TCCTACTCGCTGGTGGAGCGCGGGTGGCGGAGCAGCACTGTGAGCTACGTGTGCTGACGCGGAGA
GCGGCAAGGTGTACGCGCTGCAGCCGCTAGACCAGGAGGCTGGAGCTGCTGCAGTTCCAGGTGAGCGC
GCGCGACGCGCGCTGCCGCTCTGGGAGCAACGTGACGCTGCAGGTGTTCTGCTGGACGAGAACGAC
AACGCGCCGCGACTGCTGGGACTCCGGCTGGCAGCGCAGGAGGCGCAGTTAGCGAGTTGGTACCGCGGT
CGGTGGGTGCGGGCCACGTGGTGGCGAAAGTGCGCGCGGTGGACGCTGACTCCGGCTATAACGCTTGGCT
GTCTACGAGTTGCAACCGGCGGGGTGGCGCGCACATCCGTTCCACGTGGGGCTGTACACTGGCGAG
ATCAGCACGACGCGATCCTGGATGAGGCGGAGCTCCGCGCCACCGCTGCTGGTGCTGGTGAAGGACC
ACGGTGAGCCCGCGCTGACGTCCACGGCCACGGTGTGGTGTGCTGGTGGAGAACGCCAGGCCCCAAA
GACGTGCTCGCGGGCCTCAGTGGGCGCTGTGGATCCCGAAGCGGCTCTGGTGGATATTAACGTGTACCTC
ATCATCGCCATCTGTGCGGTGTCCAGCCTGCTGGTGTGCTCACGCTGCTGCTGTAAGTGTGCTGCTGCT
CAGCGCGCCGCGACGTGAGCGGTGCGCGCGGCAAGCCACGCTGGTGTGCTCCAGCGCGTGGGGAG
TTGGTCTTACTCGCAGCAGAGGAGGAGGAGGTGTGCTCTGCAGAGAGCCGCCCAAGACGGACCTCATG
GCCTTCAGCCCAAGCCTTCAGCTGTCTCGAGAAGATTGTTTAAATCCTCCAGTGAAGTAAGTTAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC224403 protein sequence
Red=Cloning site Green=Tags(s)

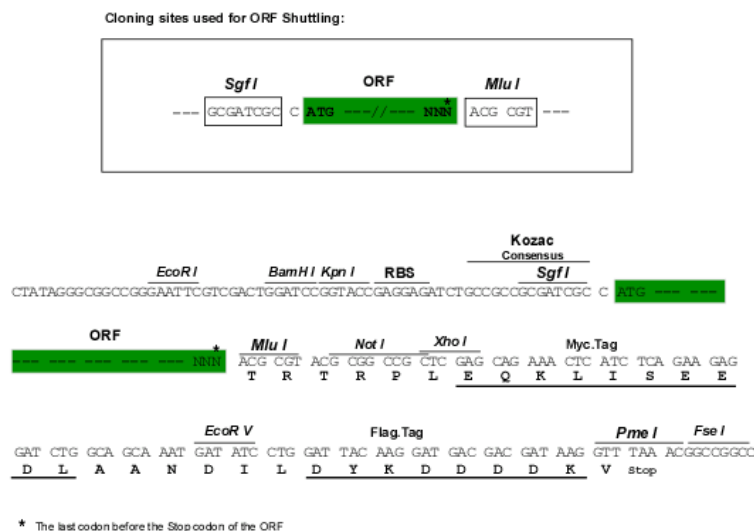
MVIIGPRGPGSQRLLLSLLLLAAWEVSGQLHYSVYEEAKHGTFVGRIAQDLGLELAELVPRLFRVASKR
HGDLLLENLQNGILFVNSRIDREKLCGRSAECISIHLEIVDRPLQVFHVDVEVKDINDNPPVFREREQKV
PVSESAPLDSHFPLEGASDADIGVNSLLTYALSLNENFELIKTKKDKSILPELVLRKLLDREQTPKLN
LLMVIDGGKPELTGVSQIQITVLDVNDNGPAFDKPSYKVLSENVQNDTRVIQLNASDPDEGLNGEISYG
IKMILPVSEKCMFSINPDTEIRIYGELDFEENNAYEIQVNAIDKGIPSMAGHSMVLVEVLDVNDNVPEV
MVTSLSLPVQEDAQVGTVIALISVSDRDSGANGQVICSLTPHVPFKLVSTYKNYSLVLDSDALDRESVSA
YELVVTARDGGSPSLWATARVSEVADVNDNAPAFAPQPEYTVFVKENPPGCHIFTVSAWDADAQKNALV
SYSLVERRVGEHALSSVSVHAESGKVYALQPLDHEEELLQFQVSARDAGVPPLGSNVTLQVFLDEND
NAPALLATPAGSAGGAVSELVPRSVGAGHVAKVRAVDADSGYNALSYELQPAAVGAHIPFHVGLYTGE
ISTTRILDEADAPRHRLVLVKDHGEPALTSTATVLSLVENGQAPKTSRASVGAVDPEAALVDINVYL
IIAICAVSSLLVLTLLYTALRCSAPPTVSRCAPGKPTLVCSAVGSWSYSQRRQVCSAESPPKTDLM
AFSPSLQLSREDCLNPPSEVSY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN:

NM_031864

ORF Size:

2376 bp

OTI Disclaimer:

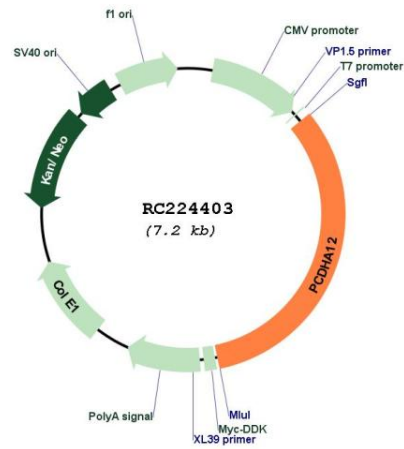
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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_031864.3
RefSeq Size:	2588 bp
RefSeq ORF:	2379 bp
Locus ID:	56137
UniProt ID:	Q9UN75
Cytogenetics:	5q31.3
Protein Families:	Transmembrane
MW:	85.6 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 RC224403