

## Product datasheet for RC222672

### PCDH10 (NM\_032961) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PCDH10 (NM_032961) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PCDH10
Synonyms:	OL-PCDH; PCDH19
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC222672 representing NM_032961 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGATTGTGCTATTATTGTTTGCCTTGCTCTGGATGGTGGAAAGGAGTCTTTTCCAGCTTCACTACACGG  
TACAGGAGGAGCAGGAACATGGCACTTTCGTGGGAATATCGCTGAAGATCTGGGTCTGGACATTACAAA  
ACTTTCCGGCTCGCGGTTTCAGACGGTGCCCAACTCAAGGACCCCTTACTTAGACCTCAACCTGGAGACA  
GGGTGCTGTACGTGAACGAGAAAATAGACCGCAACAAATCTGCAAACAGAGCCCTCCTGTGCTCTGC  
ACCTGGAGGTCTTCTGGAGAACCCCTGGAGCTGTTCCAGGTGGAGATCGAGGTCTGGACATTAAATGA  
CAACCCCTCTTTCCGGAGCCAGACCTGACGGTGGAAATCTCTGAGAGCGCCACGCCAGGCACTCGC  
TTCCCTTGAGAGCGCATTTCGACCCAGACGTGGGCACCAACTCCTTGCGCGACTACGAGATCACCCCA  
ACAGCTACTTCTCCCTGGACGTGCAGACCCAGGGGATGGCAACCGATTTCGCTGAGCTGGTCTGGAGAA  
GCCACTGGACCGAGAGCAGCAAGCGGTGCACCGCTACGTGCTGACCGCGGTGGACGGAGGAGGTGGGGGA  
GGAGTAGGAGAAGGAGGGGGAGGTGGCGGGGAGCAGGCCTGCCCCAGCAGCAGCGCACCGGCACGG  
CCCTACTACCATCCGAGTGTGGACTCCAATGACAATGTGCCCGCTTTCGACCAACCCGTCTACTACTGT  
GTCCCTACCAGAGAACTCTCCCCAGGCACTCTCGTATCCAGCTCAACGCCACCGACCCGGAGAGGGC  
CAGAACGGTGAGGTCTGTACTCTTTCAGCAGCCACATTTCCGCCCGGGCGGGAGCTTTTCGGACTCT  
CGCCGCGCACTGGCAGACTGGAGGTAAGCGCGAGTTGGACTATGAAGAGAGCCAGTGTACCAAGTGTA  
CGTGCAAGCCAAGGACCTGGGCCCAACGCCGTGCCTGCGCACTGCAAGGTGCTAGTGCGAGTACTGGAT  
GCTAATGACAACGCGCCAGAGATCAGCTTTCAGCACCGTGAAGGAAGCGGTGAGTGAGGGCGCGGCCCG  
GCACTGTGGTGGCCCTTTTCAGCGTACTGACCGGACTCAGAGGAGAATGGGCAGGTGCAGTGCAGACT  
ACTGGGAGACGTGCCTTTCCGCCTCAAGTCTTCTTTAAGAATTACTACACCATCGTTACCGAAGCCCC  
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CCACCAGTAAGTCGATCCAGGTACAAGTGTGGATGTGAACGACAACCGCCCGCTTTCAGCCAGCCGT  
CTACGACGTGATGTGACTGAAACAACGTGCCTGGCGCTACATCTACGCGGTGAGCGCCACCGACCGG



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GATGAGGGCGCCAACGCCAGCTTGCTACTCTATCCTCGAGTGCCAGATCCAGGGCATGAGCGTCTTCA  
 CCTACGTTTCTATCAACTCTGAGAACGGCTACTTGTACGCCCTGCGCTCCTTCGACTATGAGCAGCTGAA  
 GGACTTCAGTTTTTCAGGTGGAAGCCCGGACGCTGGCAGCCCCAGGCGCTGGCTGGTAACGCCACTGTC  
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 GCTGGTGGATGGCGCGTGGAGCCCCAGGGCGGGGCGGAGCGGAGGGGTCAGGAGAGCACCCAG  
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 AGTGGTATGAGACAGTGAACAGGGAGATAGTGATCATGATGCCACCAACCGTGCACGTCAGCTGGTA  
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 GCAAAGAGAAGGCCCTTACAGCACTCTGGAGAGGAAGGAGCTGGATGGACTGCTGACTAATACGCGGAGC  
 GCCTTACAAACCACCATATTTGACACGGAAGGATATGC

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC222672 representing NM\_032961

Red=Cloning site Green=Tags(s)

MIVLLLFALLWMVEGVFSQLHYTVQEEQEHTFVGNIAEDLGLDITKLSARGFQTPNSRTPYLDLNLLET  
 GVLVYNEKIDREQICKQSPSCVLHLEVFLENPLELFQVEIEVLDINDNPPSFPEPDLTVEISESATPGTR  
 FPLESAPDPDVGTVNSLRDYEITPNSYFSLDVQQTQGDGNRFELVLEKPLDREQQAVHRYVLTAVDGGGGG  
 GVGEGGGGGGAGLPPQQRTGTALLTIRVLDSDNDNVPFDQPVYTVSLPENSPPGTLVIQLNATDPDEG  
 QNGEVVYFSSHISPRARELFGLSPRTGRLEVSGELDYEE SPVYQVYVQAKDLGPNVAVPAHCKVLVRVLD  
 ANDNAPEISFSTVKEAVSEGAAPGTVVALFSVTDRDSEENGQVQCELLGDVPFRLKSSFKNYTIVTEAP  
 LDREAGDSYTLTVVARDRGEPAALSTSKSIQVQVSDVNDNAPRFSQPVYDVVVTENNVPYAYIYAVSATDR  
 DEGANALAYSILECQIQGMSVFTYVINSENGYLYALRSFDYEQLKDFSFQVEARDAGSPQALAGNATV  
 NILIVDQNDNAPAIYVAPLPGRNGTPAREVLPRSAEPGYLLTRVAAVDADDGENARLTYSIVRGNEMNLF  
 MDWRTGELRTARRVPAKRDPQRPYELVIEVRDHGPPPLSSTATLVVQLVDGAVEPQGGGSGGGSGEHQ  
 RPSRSGGGETSLDLTLILIIALGSVSFIFLLAMIVLAVRCQKEKLNIIYTCCLASDCLCCCCGGGGSTC  
 CGRQARARKKLSKSDIMLVQSSNVPNPAQVPIEESGGFGSHHHNQNYCYQVCLTPESAKTDLMLFKPC  
 SPSRSTDEHNPCGAIIVTGYTDQPDII SNGSILSNETHQRAELSYLVDRPRRVNSSFQAEADIVSSKD  
 SGHGDSEQGDSDHDATNRAQSAGMDLFSNCTEECKALGHSRDCWMPSPVSDGRQAADYRSNLHVPGMDS  
 VPDEVFETPEAQPGAERSFSTFGKEKALHSTLERKELDGLLTNTRAPYKPPYLTRKRIC

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_032961

**ORF Size:** 3120 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.

**RefSeq:** [NM\\_032961.3](#)

**RefSeq Size:** 5384 bp

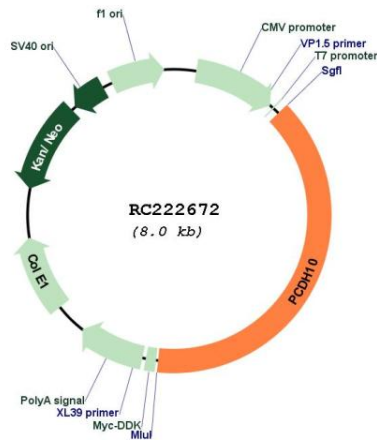
**RefSeq ORF:** 3123 bp

**Locus ID:** 57575

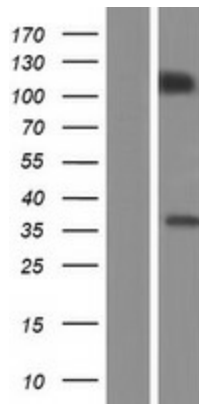
UniProt ID: [Q9P2E7](#)  
 Cytogenetics: 4q28.3  
 Domains: CA  
 Protein Families: Druggable Genome, Transmembrane  
 MW: 110.8 kDa

**Gene Summary:** This gene belongs to the protocadherin gene family, a subfamily of the cadherin superfamily. This family member contains 6 extracellular cadherin domains, a transmembrane domain and a cytoplasmic tail differing from those of the classical cadherins. The encoded protein is a cadherin-related neuronal receptor thought to function in the establishment of specific cell-cell connections in the brain. This gene plays a role in inhibiting cancer cell motility and cell migration. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jan 2015]

**Product images:**



Circular map for RC222672



Western blot validation of overexpression lysate (Cat# [LY409845]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222672 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).