

## Product datasheet for **RG222672**

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

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PCDH10 (NM_032961) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PCDH10
Synonyms:	OL-PCDH; PCDH19
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG222672 representing NM_032961 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGATTGTGCTATTATTGTTTGCCTTGCTCTGGATGGTGGAAAGGAGTCTTTCCAGCTTCACTACACGG  
TACAGGAGGAGCAGGAACATGGCACTTTCGTGGGAATATCGCTGAAGATCTGGTCTGGACATTACAAA  
ACTTTCGGCTCGCGGTTTCAGACGGTGCCCACTCAAGGACCCCTTACTTAGACCTCAACCTGGAGACA  
GGGGTGTGTACGTGAACGAGAAAATAGACCGCAACAAATCTGCAAACAGAGCCCCTCTGTGCTCTGC  
ACCTGGAGGTCTTCTGGAGAACCCCTGGAGCTGTTCCAGGTGGAGATCGAGGTGCTGGACATTATGA  
CAACCCCCCTCTTTCGGGAGCCAGACCTGACGGTGAAATCTCTGAGAGCGCCACGCCAGGCACTCGC  
TTCCTTGGAGAGCGCATTTCGACCCAGACGTGGGCACCAACTCCTTGCGCGACTACGAGATCACCCCA  
ACAGCTACTTCTCCCTGGACGTGCAGACCCAGGGGGATGGCAACCGATTTCGCTGAGCTGGTCTGGAGAA  
GCCACTGGACCGAGAGCAGCAAGCGGTGCACCGCTACGTGCTGACCGCGGTGGACGGAGGAGGTGGGGGA  
GGAGTAGGAGAAGGAGGGGGAGGTGGCGGGGAGCAGGCCCTGCCCCCAGCAGCAGCGCACCGGCACGG  
CCCTACTACCATCCGAGTGTGGACTCCAATGACAATGTGCCCGCTTTCGACCAACCCGTCTACTACTGT  
GTCCCTACCAGAGAACTCTCCCCAGGCACTCTCGTGATCCAGCTCAACGCCACCGACCCGGAGAGGGC  
CAGAACGGTGAGGTCTGTACTCTTTCAGCAGCCACATTTCCGCCCGGGCGGGAGCTTTTCGGACTCT  
CGCCGCGCACTGGCAGACTGGAGGTAAGCGCGAGTTGGACTATGAAGAGAGCCCAAGTGTACCAAGTGTA  
CGTGCAAGCCAAGGACCTGGGCCCAACGCCGTGCCTGCGCACTGCAAGGTGCTAGTGCGAGTACTGGAT  
GCTAATGACAACGCGCCAGAGATCAGCTTTCAGCACCGTGAAGGAAGCGGTGAGTGAGGGCGCGGCCCG  
GCACTGTGGTGGCCCTTTCAGCGTACTGACCGCGACTCAGAGGAGAATGGGCAGGTGCAGTGCAGCT  
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CTACGACGTGATGTGACTGAAACAACGTGCCTGGCGCTACATCTACGCGGTGAGCGCCACCGACCGG



GATGAGGGCGCCAACGCCAGCTTGCTACTCTATCCTCGAGTGCCAGATCCAGGGCATGAGCGTCTTCA  
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 GGACTTCAGTTTTTCAGGTGGAAGCCCGGGACGCTGGCAGCCCCAGGCGCTGGCTGGTAACGCCACTGTC  
 AACATCCTCATAGTGGATCAAAATGACAACGCCCTGCCATCGTGGCGCCTTACCAGGGCGCAACGGGA  
 CTCCAGCGCTGAGGTGCTGCCCCGCTCGGCGGAGCCGGTTACCTGCTACCCGCGTGGCCGCGTGA  
 CGCGGACGACGGGAGAACGCCCGGCTCACTTACAGCATCGTGCCTGGCAACGAAATGAACCTCTTTCGC  
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 ATGAGCTGGTGATCGAGGTGCGCGACCATGGGCAGCCGCCCTTCTCCACCGCCACCCTGGTGGTTCA  
 GCTGGTGGATGGCGCGTGGAGCCCCAGGGCGGGGCGGAGCGGAGGGGTCAGGAGAGCACCCAG  
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 CGGTGTCCTTCTCTTCTGCTGGCCATGATCGTGTGGCGTGCCTGCCCCAAAAGAGAAGAAGCTCAA  
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 AGCCCTTCGCGGAGTACGGACACTGAGCACAACCCTGCGGGGCCATCGTACCAGGTTACACCGACCAGC  
 AGCCTGATATCATCTCCAACGGAAGCATTTTGTCCAACGAGACTAAACACCAGCGAGCAGAGCTCAGCTA  
 TCTAGTTGACAGACCTCGCCGAGTTAACAGTCTGCATTCAGGAAGCCGACATAGTAAGCTCTAAGGAC  
 AGTGGTATGAGACAGTGAACAGGGAGATAGTGATCATGATGCCACCAACCGTGCACGTCAGCTGGTA  
 TGGATCTCTTCTCAATTGCACTGAGGAATGTAAGCTCTGGCCACTCAGATCGGTGCTGGATGCCTTC  
 TTTTGTCCCTTCTGATGGACGCCAGGCTGCTGATTATCGCAGCAATCTGCATGTTCTGCGATGGACTCT  
 GTTCCAGACACTGAGGTGTTTGAACCTCAGAAGCCAGCCTGGGGCAGAGCGGTCCTTTCCACCTTTG  
 GCAAAGAGAAGGCCCTTACAGCACTCTGGAGAGGAAGGAGCTGGATGGACTGCTGACTAATACGGGAGC  
 GCCTTACAAACCACCATATTTGACACGGAAAAGGATATGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG222672 representing NM\_032961  
 Red=Cloning site Green=Tags(s)

MIVLLLFALLWMVEGVFSQLHYTVQEEQEHGTFVGNIAEDLGLDITKLSARGFQTPVNSRTPYLDLNLLET  
 GVLYVNEKIDREQICKQSPSCVLHLEVFLNPLELFQVEIEVLDINDNPPSFPEPDLTVEISESATPGTR  
 FPLESADFDPDVGNTSLRDYEITPNYSYSLDVQQTQGDGNRF AELVLEKPLDREQQAVHRYVLTAVDGGGGG  
 GVGEGGGGGGAGLPPQQRTGTALLTIRVLDSNDNVPADFQPVYTVSLPENSPPGTLVIQLNATDPDEG  
 QNGEVVYSFSSHISPRARELFGLSPRTGRLEVSGELDYEE SPVYQVYVQAKDLGPNVPAHCKVLVRVLD  
 ANDNAPEISFSTVKEAVSEGAAPGTVVALFSVTD RDSEENGQVQCELLGDVPFRLKSSFKNYITIVTEAP  
 LDREAGDSYTLTVVARDRGE PALSTSKSIQVQVSDVNDNAPRFSQPVYDVVVTENNVP GAYIYAVSATDR  
 DEGANAQLAYSILECQIQMSVFTYVSINSENGYLALRSFDYELKDFSFQVEARDAGSPQALAGNATV  
 NILIVDQNDNAPAIVAPLPGRNGTPAREVLPRSAEPGYLLTRVA AVDADDGENARLTYSIVRGNEMNLFR  
 MDWRTGELRTARRVPAKRDPQRPYELVIEVRDHGQPPLSSTATLVVQLVDGAVEPQGGGSGGGSGGEHQ  
 RPSRSGGGETSLDLTLILIIALGSVSFIFLLAMIVLAVRCQKEKLNIIYTC LASCCLCCCCGGGGSTC  
 CGRQARARKKLSKSDIMLVQSSNVPSNPAQVP IEESSGGFSGHHHNQNYCYQVCLTPESAKTDL MFLKPC  
 SPSRSTDEHNPCGAIVTGYTDQQPDII SNGSILSNETHKQRAELSYLVDRPRRVNSSFQ EADIVSSKD  
 SGHGDSEQGSDHDATNRAQSAGMDLFSNCTEECKALGHSDRCWMP SFVPSDGRQAADYRSNLHVP GMDS  
 VPDTEVFETPEAQP GAERSFSTFGKEKALHSTLERKELDGLL TNTRAPYKPPYLTRKRIC

TRTRPLE - GFP Tag - V

**Restriction Sites:**

Sgfl-Mlul

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](#)

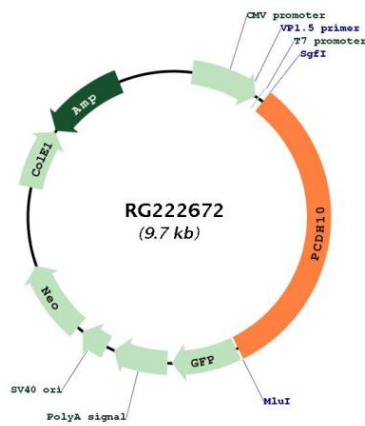
RefSeq Size: 5384 bp

RefSeq ORF: 3123 bp

**Locus ID:** 57575  
**UniProt ID:** [Q9P2E7](#)  
**Cytogenetics:** 4q28.3  
**Domains:** CA  
**Protein Families:** Druggable Genome, Transmembrane

**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 RG222672