

## Product datasheet for **RG207717**

### PCDH1 (NM\_002587) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PCDH1 (NM_002587) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PCDH1
Synonyms:	PC42; PCDH42
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG207717 representing NM_002587 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGACAGCGGGCGGGCGGCCGGCTGCCCGGAGGCGGCCCTCCTGATTCTGGGGCTCCCAGGATGG  
AGCACCTGAGGCACAGCCAGGCCCTGGGGGCAACGGCTACTGCTGCCCTCCATGCTGCTAGCACTGCT  
GCTCCTGCTGGCTCCATCCCCAGGCCACGCCACTCGGGTAGTGTACAAGGTGCCGGAGAACAGCCACCC  
AACACCCTCATTGGGAGCCTCGCAGCCGACTATGGTTTTCCAGATGTGGGGCACCTGTACAAGCTAGAGG  
TGGGTGCCCGTACCTTCGCGTGGATGGCAAGACAGGTGACATTTTACCACCGAGACCTCCATCGACCG  
TGAGGGGCTCCGTGAATGCCAGAACCAGCTCCCTGGTATCCCTGCATCCTGGAGTTGAGGTATCTATC  
ACAGACCTCGTGCAATGGCAGCCCCGGCTGTAGAGGGCCAGATAGAAGTACAAGACATCAATGACA  
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CCCCATCCCGCTGGCTTCAGACCGTGTGCTGGTCCCAACGGTGTGGCATCCTATGAGCTGCAGGCTGGG  
CCTGAGGCCAGGAGCTATTTGGGCTGCAGGTGGCAGAGGACCAGGAGGAGAAGCAACCACAGCTCATTG  
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CCCCCACGCGCCAGCAGTGCCTGTGCGTGTACCCTGCTTGACACCAATGACAACGCCCCCAAGTTT  
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GGTCTTCTTCGACTGGACAGGAACACTGGACTTATCACTGTTTCAAGGCCCGGTGGACCGTGAGGACCTA  
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AGGCCAGTGAGACAGGACAGTGCAGCAAGAAGAAGTATTTCTGCAGACTACCACCCCGCTAGACTACGA  
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TCCCTCAAGGTGCAGGTGGTGGACGTCAATGACAACGCACCTGTCTTCACTCAGAGTGTCACTGAGGTCC  
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 CTACCCACGAGCCCTGACCTGGGCCGCCACTATCGCTCTAACTCCCCTGCCTCCATCCAGCTG  
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 CAAATACCCAGCAAGCAGGTAGGCCAGCCCTTCAGCTCAGCACACCCAGCCCTACCCACCCCTAC  
 CACGGAGCCATCTGGACCAGGTGTGGAG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG207717 representing NM\_002587  
 Red=Cloning site Green=Tags(s)

MDSGAGGRRCP EAALLILGPPRMEHLRHSPGPGGQRLLLPSMLLALLLLLAPSPGHATRVVYKVPPEEQPP  
 NTLIGSLAADYGFDPVGHLYKLEVGAPYL RVDGKTGDIFTTETSIDREGLRECQNQLPGDPCILEFEVSI  
 TDLVQNGSPRLLEGQIEVQDINDNTPNF ASPVITLAIPENTNIGSLFPIPLASDRDAGPNGVASYELQAG  
 PEAQELFGLQVAEDQEEKQPQLIVMGNLDRERWDSYDLTIKVQDGGSPPRASSALLRVTVLDTNDNAPKF  
 ERPSYEAELSENSPIGHSVIQVKANDSDQGANAEIEYTFHQAPEVVRLLRLDRNTGLITVQGPVDREDL  
 STLRFSVLAKDRGTNPKSARAQVVVTVKDMNDNAPTIEIRGIGLVTHQDGMANISEDVAETAVALVQVS  
 DRDEGENAAVT CVVAGDVPFQLRQASETGSDSKKYLQTTTPLDYEKVKDYTIEIVAVDSGNPPLSSTN  
 SLKVQVVDVNDNAPVFTQSVTEVAF PENNKPGEVIAEITASDADSGSNAELVYSLEPEPAAKGLFTISPE  
 TGEIQVKTSLDREQRESYELKVVAADRGSPLQGTATVLVNVLDCNDNDPKFMLS GYNF SVMENMPALSP  
 VGMVTVIDGDKGENAQVQLSVEQDNGDFVIQNGTGTILSSLSFDREQQSTYTFQLKAVDGGVPPRSAYVG  
 VTINVLDENDNAPYITAPSNTSHKLLTPQTRLGETVVSQVAEDFDSGVNAELIYSIAGGNPYGLFQIGSH  
 SGAITLEKEIERRHHGLHRLVVKVSDRGKPPRYGTALVHLVYNETLANRLLLETLLGHSLDTPLDIDIA  
 DPEYERSKQRGNILFGVVAGVVAVALLIALAVLVRYCRQREAKSGYQAGKKT KDLYAPKPSGKASKGNK  
 SKGKSKSPKPVKPVVEDEEAGLQKSLKFNLMSDAPGDSPRIHLPLNYPGSPDLGRHYRSNSPLPSIQL  
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 HGAIWTEVWE

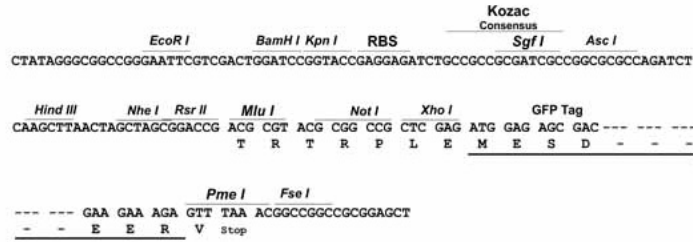
TRTRPLE – GFP Tag – V

**Restriction Sites:**

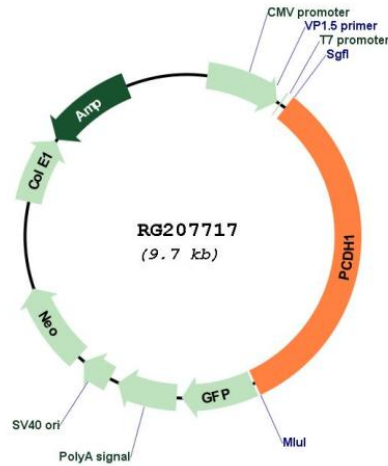
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM\_002587

ORF Size: 3180 bp

<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
<b>Components:</b>	<p>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).</p>
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<p><a href="#">NM_002587.3</a>, <a href="#">NP_002578.2</a></p>
<b>RefSeq Size:</b>	<p>3851 bp</p>
<b>RefSeq ORF:</b>	<p>3183 bp</p>
<b>Locus ID:</b>	<p>5097</p>
<b>UniProt ID:</b>	<p><a href="#">Q08174</a></p>
<b>Cytogenetics:</b>	<p>5q31.3</p>
<b>Domains:</b>	<p>CA</p>
<b>Protein Families:</b>	<p>Transcription Factors, Transmembrane</p>
<b>Gene Summary:</b>	<p>This gene belongs to the protocadherin subfamily within the cadherin superfamily. The encoded protein is a membrane protein found at cell-cell boundaries. It is involved in neural cell adhesion, suggesting a possible role in neuronal development. The protein includes an extracellular region, containing 7 cadherin-like domains, a transmembrane region and a C-terminal cytoplasmic region. Cells expressing the protein showed cell aggregation activity. Alternative splicing occurs in this gene. [provided by RefSeq, Jul 2008]</p>