

Product datasheet for **RG223080**

PCDHA5 (NM_018908) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PCDHA5 (NM_018908) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PCDHA5
Synonyms:	CNR6; CNRN6; CNRS6; CRNR6; PCDH-ALPHA5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>RG223080 representing NM_018908
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGTATATCCCGGAGAGGAAGTCTGGGATCCCGGCTCTGCTGCTCTGGCTTCTCCTTGCCACTGGA
 AGGCAGGGAGCGCCAGCTCCACTACTCGATCCCGGAGGAAGCCAAACACGGAACCTTCGTTGGCCGAT
 CGCGCAGGACCTAGGGCTGGAGCTGGCGGAGCTGGTGCCGCGCCTGTTCCGGGTGGCGTCCAAGGGCCG
 GGGACCTTCTGGAGGTAATCTGCAGAAATGGCATTGTTGTTGTGAATTCTCGGATCGACCGGGAGGAGC
 TGTGCCGCGGAGGGCGGAGTGCAGCATCCACCTGGAGGTGATCGTGGACAGGCCGCTGCAGGTTTTCCA
 TGTGGAGGTGGCAGTGAAGGACATCAATGACAATCCGCCAGGTTCTCCAGACAAGAACAAGATTATTC
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 AACGAACTTTTAGAGCTGGTTTTGAGGAAATCCTTAGATAGAGAAGAAACACAAGAACACCGTTTTATTA
 GTGATTGCAACTGATGGAGGAAAACCCGAACTAACAGGTACAGTTCAGTTGTTGATCAATGTATTGGATG
 CTAATGATAACGCCCCAGAATTTGATAAATCCATTTATAATGTCAGATTGTTGAAAAATGCACCAAGTGG
 GACATTAGTTATTAACCTGAACGCCTCAGATGCAGATGAGGGCATCAATAAGGAAATAGTGTATTTCTTT
 AGTAATCTTGTCTTGACGATGTAAGTCCAAATTTATAATTAATTCTAACTACTGGTAAATAAAAGTTA
 ACGGGAACTGGATTATGAAGACTATAACTCATATGAAATTAATATTGATGCCATGGATAAAAGTACATT
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 GTCACCTTCAAGAATTACTACTCGTTGGTGTCTGGACAGCGCCCTGGACCGCAGAGCGTGTCTGGTCTAT
 GAGCTGGTGGTGACCGCGCGGGACGGGGCTCGCCTTCGCTGTGGGCCACCGCCAGCGTGTCTGTGGAAG
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 CCCGCCAGGCTGCCACATCTTACGGTGTCTGCACGGGACGCGGACGCGCAGGAGAACGCCCTGGTGTCC
 TACTCGCTGGTGGAGCGGGTGGGCGAGCGCCGCTGTGAGTTACGTTTCGGTGCACGCGGAGAGCG
 GCAAGGTGACGCGCTGCAGCCGCTGGACCAGGGAAGTGGAGCTGCTGCAGTTCAGGTGAGCGCGCG
 CGACGCGGGCGTCCGCCTCTGGGACGCAACGTGACGCTGCAGGTGTTCTGTCTGGACGAGAACGACAAC
 GCGCCGGCGCTGCTGGTCCCTCGAGTGGTGGCACCGGCGCGCAGTGAAGGAGTGGTCCGAGGTCAG
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 GTATGAGCTGCAGCCAGCGCTGGCAGTGCAGCATCCCGTTCCGCGTGGGGCTGTACACAGGCGAGATC
 AGCACAACACGCTCTCTGGATGAGACCGAAGCACCGCGCCACCGCCTTCTGGTGTGGTGAAGGACCATG
 GAGAGCCCCCGTGCAGCCACAGCCACAGTGTGGTGTCTGGTGGAAAGTGGCCAGGCGCCGAAGGC
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 AATCCGGTCCCGGTGAGTTGCCGACAAATTCATTATCCAGGATCTCCTGCAATCATCTCCATCCGGCA
 GGAGCCTACTAACAGCCAAATTGACAAAAGTACTTCATAACCTTCGGCAAAAAGGAGGAGACCAAGAAA
 AAGAAGAAAAAGAAGAAGGTAACAAGACCCAGGAGAAAAAGAGAAAGGGAACAGCAGCTGACAACA
 GTGACCAG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG223080 representing NM_018908
 Red=Cloning site Green=Tags(s)

MVYSRRGSLGSRLLLLWLLLAYWKAGSGQLHYSIPEEAKHGTFVGRIAQDLGLELAELVPRLFRVASKGR
 GDLLLEVNLRQNGILFVNSRIDREELCRRRAECSIHLEVIIVDRPLQVFHVEVAVKDINDNPPRFSRQEQLF
 ILESRMPDSRFPLEGASDLDIGANAQLRYRLNPNEYFDLDVKTNEEETNFLELVLRKSLDREETQEHRLL
 VIATDGGKPELTGTVQLLINVLDANDNAPEFDKSIYNVRLLENAPSGTLVIKLNASDADEGINKEIVYFF
 SNLVLDDVKSKFIINSNTGEIKVNGELDYEDYNSYEINIDAMDKSTFPLSGHCKVVVKLLDVNDNTPEMA
 ITTLFLPVKEDAPLSTVIALISVSDRDSGANGQVTCSLMPHVPFKLVSTFKNYSLVLDSDALDRESVSVY
 ELVVTARDGGSPSLWATASVSVEVADVNDNAPAFAPQYTVFVKENPPGCHIFTVSARDADAQENALVS
 YSLVERRVGERPLSSYVSVHAESGKYYALQPLDHEEVELLQFQVSARDAGVPPLGSNVTLQFVLDENDN
 APALLVPRVGGTGGAVSELVPRSVGAGHVVAKVRVAVDPDSGYNWL SYELQPAPGSARIPFRVGLYTGEI
 STTRSLDETEAPRHLLVLVKDHGEPPLTATATVLSLVESGQAPKASSRASAGAVGPEALVDVNVYLI
 IATCAVSSLLVLTLLLYALRCSAQPTAVCTRGKPTLLCSSAVGSWSYSQRRQRVCSGEAPPKTDLMA
 FSPSLPQGPTSTDNPRQPNPDWRYASLRAGMHSSVHLEEAGILRAGPGGPDQQWPTVSSATPEPEAGEV
 SPPVGAGVNSNSWTFKYGPNPKQSGGELPKDFIIPGSPAIISIRQEPNSQIDKSDFITFGKKEETK
 KKKKKKGNKTQEKKEKGNSTTDNSDQ

TRTRPLE – GFP Tag – V

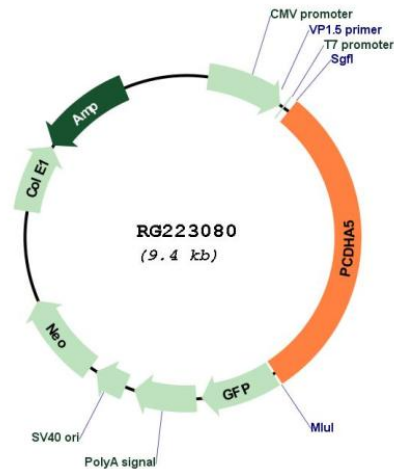
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_018908

ORF Size: 2808 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_018908.3](#)

RefSeq Size: 5218 bp

RefSeq ORF: 2811 bp

Locus ID: 56143

UniProt ID: [Q9Y5H7](#)

Cytogenetics: 5q31.3

Domains: CA

Protein Families: Transmembrane

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]