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Product datasheet for RG209209

PCDHAC2 (NM_018899) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PCDHAC2 (NM_018899) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PCDHAC2
Synonyms:	PCDH-ALPHA-C2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG209209 representing NM_018899
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGCAGGCGGGCACCAGACCTGCGGCGACAGAGCATCCACGGCTCCGGCGGCCCATGCCCTGGCTGC
TGCTACTGCCTCTCCTGCTGCTGTTGCTGCTGCTGCTACCTGGCCCAGCGGCCTCCCAGCTGCGATACTC
TGTGCCAGAGGAGCAGGCACCCGGCGCGCTCGTGGGCAACGTGGCTCGCGCGCTGGGGCTTGAGCTGCGG
CGCTTGGGGCCGGGTTGCTTGCGCATCAACCATCTGGGTGCGCCCAGTCCGCGCTACCTGGAGCTGGACC
TGACGAGTGGAGCGCTCTTCGTCAACGAGCGCATTGATCGGGAGGCGCTGTGTGAGCAGCGGCCTCGCTG
CCTGCTCAGCCTGGAAGTGCTGGCGCACAACCCCGTGGCGGTGAGCGCCGTTGAGGTGGAAATATTGGAC
ATCAACGACAACTCACCGCGTTTCCCGCGGCCCAACTACCAGCTTCAGGTAAGCGAATCGGTGGCGCCTG
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CAGCCCCAGCGAGCACTTCGAGCTGGACCTTAAGCCCCTGCAGGAGAACAGTAAAGTGCTTGAGCTGGTG
CTGCGTAAGGGCCTAGACCGGGAGCAGGCAGCCTTGCACCACCTGGTTCTCACAGCCGTGGATGGGGGCA
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AAGCTTCCTGGAGGACTCCTATTCCATCTACATACAGGAGAACAATTTGCCAGGTGTGTTGCTCTGTACT

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GTGCAAGCCACAGACCCAGATGAAAAGGAGAATGCAGAGGTGACCTACTCCCTTCTGGAGAGGGAGATTC
AAGGGCTGCCAGTCACCTCCTATGTCTCCATTAACAGTGCCAGTGGCAGCCTTTATGCTGTCAACTCCTT
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AAAAAGAAGAAAAAGAAGAAGGGTAACAAGACCCAGGAGAAAAAAGAGAAAGGGAACAACACGACTGACA
ACAGTGACCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG209209 representing NM_018899
Red=Cloning site Green=Tags(s)

MEQAGTRPAATEHPRLRRPMPWLLLLPLLLLLLLLLPGPAASQLRYSVPEEQAPGALVGNVARALGLELR
RLGPGCLRINHLGAPSPRYLELDLTSGALFVNERIDREALCEQRPRCLLSLEVLAHNPVAVSAVEVEILD
INDNSPRFPRPNYQLQVSESVAPGARFHIESAQDPDVGANSVQTYELSPSEHFELDLKPLQENSKVLELV
LRKGLDREQAALHHLVLTAVDGGIPARSGTAQISVRVLDTNDNSPAFDQSTYRVQLREDSPPGTLVVKLN
ASDPDEGSNGELRYSLSSYTSDRERQLFSIDASTGEVRVIGGLDYEEASSYQIYVQATDRGPVPMAGHCK
VLVDIVDVNDNAPEVVLTDLYSPVPENATPNTIVAVLSVNDQDSGPNRKVSLGLEATLPFRLNGFGNSYT
LVVSGPLDRERVAVYNITVTATDGGIPQLTSLRTLKVEISDINDNPPSFLEDSYSIYIQENNLPGVLLCT
VQATDPDEKENAEVTYSLLEREIQGLPVTSYVSINSASGSLYAVNSFDYEKFREFFVTVEAQDKGSPPLS
STVTANVYVVDMNDHAPHILYPTSTNSSAAFEMVPRTAPAGYLVTKVIAMDSDSGQNAWLFYHLAQTSDL
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YSEITLYLIIALSTVSFIFLLTIIILSIIKCYRYTAYGTACCGGFCGVRERSPAELYKQANNNIDARIPH
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GNLIILKNEAVSQNEPRQPNPDWRYSASLRAGMHSSVHLEEAGILRAGPGGPDQQWPTVSSATPEPEAGE
VSPPVGAGVNSNSWTFKYGPGNPKQSGPGELPDKFIIPGSPAIISIRQEPTNSQIDKSDFITFGKKEETK
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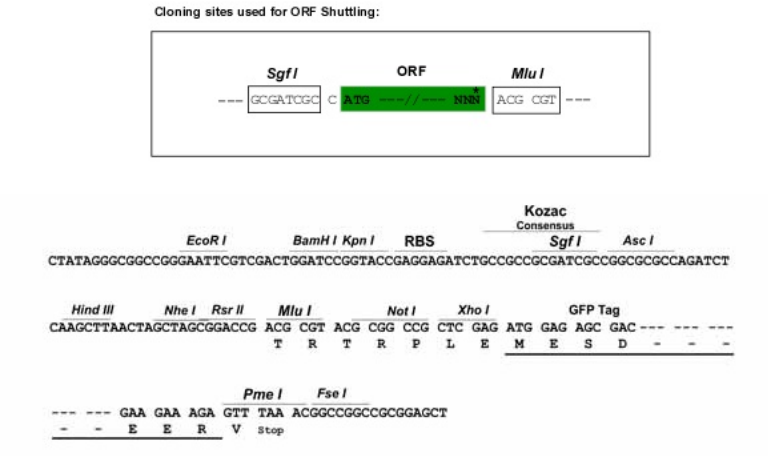
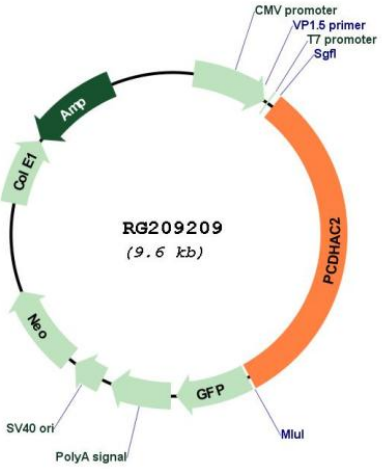
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_018899

ORF Size: 6033 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_018899.4, NP_061722.1
RefSeq Size:	5684 bp
RefSeq ORF:	3024 bp
Locus ID:	56134
UniProt ID:	Q9Y5I4
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]