

Product datasheet for **SC314942**

PCDHGA5 (NM_018918) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Tag Free
Symbol:	PCDHGA5
Synonyms:	CDH-GAMMA-A5; ME3; PCDH-GAMMA-A5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



Fully Sequenced ORF:

>SC314942 representing NM_018918.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCGAGTCCACCTAGGGCTGGGGCTGCGGAGAGCTGCTGCTGCCCTTCATGCTCCTGGGACGCTG
TGCGAGCCAGGATCCGGGAGATCCGCTACTCGATGCCGAGGAGCTGGACAAAGGCTCCTTCGTCGGC
AACATAGCCAAGGACCTTGGGCTGGAGCCCCAGGAGCTGGCGGAGCGCGAGTCCGCATCGTCTCCAGA
GGTAGGACGCAGCTTTTGCCTGAACCCGCGAAGCGGCAGCTTGGTCACCGCGGGCAGGATAGACCGG
GAGGAGCTCTGCGCTCAGAGCCCACTGTGTGTGGTGAACCTTAACATCTTGGTTGAGAACAAAATGAAA
ATTTATGGAGTAGAAGTAGAAAATATCGATATTAATGATAACTTCCCGCGTTTCCGGGATGAAGAGTTA
AAAGTAAAAGTTAATGAAAATGCGGCTGCAGGGACACGGTTAGTGCTTCCCTTCGCGCGGGATGCCGAT
GTGGGTGTGAACCTCTCCGGAGTTACCAGCTCAGCTCCAATCTGCACTTCTCTCTGGATGTGTAAGC
GGAAGTGTGAGACAAAAGTATCCGGAGCTGGTGTGGAACAGCCCCAGACCGCGAGAAAGAGAGCTGT
CACGACCTCCTCTCACAGCTTAGATGGCGGAGACCCGCTACTCTCCGGCACCACGCACATCCGTGT
ACGGTCTCGACGCAACGACAATGCGCCCTGTTACCCCATCCGAGTACAGCGTGAAGTGTCCAGAG
AACATACCTGTGGGCACTCGGCTGCTCATGCTAACCGCCACGGATCCAGATGAGGGAATAAACGGGAAA
TTGACCTACTCTTTTCGCAATGAAGAAGAAAAATTTCCGAGACTTCCAACCTGATTCCAACCTGGGG
GAAATCTCAACTCTACAATCACTGGACTATGAAGAATCCAGATTCTACCTCATGGAAGTGGTAGCTCAG
GATGGAGGCGCTCTTGTGCCAGCGCTAAGGTGGTGGTCACAGTACAGGACGTGAATGACAATGCCCCC
GAAGTGATCCTCACCTCTCTGACCACTTCGATCTCTGAAGACTGTCTTCCCGGAAGTGAATGCGCGCTG
TTTAGCGTACATGATGGTATTCTGGAGAAAATGGTGAGATTGCATGCTCTATTCCTAGGAATTTGCCT
TTTAAATTGGAGAAGTCAGTTGATAATTACTATCACCTATTAACAAGTGGGACCTGGACAGAGAAGAG
ACTTCAGATTATAATATCACTTAACCGTCATGGACCATGGAACCCCGCCCTCTCTACAGAAAGCCAC
ATCCCCCTTGAAGTAGCAGACGTTAATGACAACCCACCAATTTCCCTCAAGCTCCTACTCCACCTCT
GTCACAGAAAACATCCAGAGGTGTCTCTATCTTCTGTGACAGCCCATGACCCGACAGCGCGAC
AACGCTCGAGTCACCTACTCCCTGGCTGAAGACACATTTAGGGGGCGCCCTTGCTCTCTATGTATCC
ATTAACCTCTGACACCGGTGTCTGTATGCTCTGAGATCCTTCGACTATGAGCAGTTGAGAGACCTACAG
TTGTGGGTGACAGCCAGCGACAGTGGGAACCTCCACTAGCAGCAACGTGTGCTGAGCCTGTTTGTG
CTGGACCAGAACGACAATACGCTGAGATCCTGTACCCCGCCCTCCACAGACGGTTCCACGGGCGTG
GAGCTGGCGCTCGCTCCGAGAACCTGGCTACCTGGTGACCAAGGTGGTAGCGGTGGAACAAGATTCA
GGCCAGAACGCTGGCTGTCTACCGCTGCTTAAGGCCAGCGAGCCAGGACTCTTTCGCGTTGGGCTG
CACACGGGCGAGGTGCGCACAGCGCGAGCCCTGCTGGACAGAGACGCGCTCAAGCAGAGCCTCGTGGTG
GCCGTGCAAGACCATGGCCAGCCCCCTCTGTGACGCACCTTACGGTACCGTTGCCGTGGCCGACAGG
ATCCCTGACATCCTGGCTGACCTAGGCAGTATCAAGACCCCATGACCTGAGGATCTGGACCTCACA
CTCTATCTTGTGGTGGCAGTGGCTGCACTCTCCTGCGTCTTCTGCGCTTCGTATCGTGCTGCTGGTG
CTCAGACTGAGGCGCTGGCACAAGTCACGCTGCTTACGGCTGAAGGCAGCAGGTTGGCGGGTGTGCC
GCCTCGCACTTTGTGGGCTGGATGGGTTTCGGCTTCTCTGACAGCTATTCACAGAGGTCTCCCTC
ACCGCGGACTCGAGGAAGAGTCACTGATCTTTCCCGCCCAACTACGCAGACAGCTCCTTAGTGAA
GAGAGCTGTGAGAAAAGCGAGCCTCTTCTGATGTCTGATAAGGTAGATGCAAAACAAAGAACGGCGA
GTTAGCAAGCCCCGCCAACACGGAAGTGGCGTTTCTCTCAGGCCAGAGACCGGCACAGCGGCTCC
CAAAATGGCGATGACACCGGCACCTGGCCCAACAACAGTTTGACACAGAGATGCTGCAAGCCATGATC
TTGGCGTCCGCCAGTGAAGTGTGATGGGAGCTCCACCCTGGGAGGGGTGCCGGCACCATGGGATTG
AGCGCCCGCTACGGACCCAGTTACCCCTGCAGCAGTGCCCGACTACCGCCAGAATGTCTACATCCA
GGCAGCAATGCCCACTGACCAACGCAGCTGGCAAGCGGGATGGCAAGGCCCGAGCAGGTGGCAATGGC
AACAAGAAGAAGTCGGGCAAGAAGGAGAAGAATAA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGCGCCGC

Restriction Sites:

SgfI-MluI

ACCN:

NM_018918

Insert Size:

2796 bp

OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_018918.2
RefSeq Size:	4602 bp
RefSeq ORF:	2796 bp
Locus ID:	56110
UniProt ID:	Q9Y5G8
Cytogenetics:	5q31.3
Domains:	CA
MW:	100.9 kDa

Gene Summary:

This gene is a member of the protocadherin gamma gene cluster, one of three related clusters tandemly linked on chromosome five. These gene clusters have an immunoglobulin-like organization, suggesting that a novel mechanism may be involved in their regulation and expression. The gamma gene cluster includes 22 genes divided into 3 subfamilies. Subfamily A contains 12 genes, subfamily B contains 7 genes and 2 pseudogenes, and the more distantly related subfamily C contains 3 genes. The tandem array of 22 large, variable region exons are followed by a constant region, containing 3 exons shared by all genes in the cluster. Each variable region exon encodes the extracellular region, which includes 6 cadherin ectodomains and a transmembrane region. The constant region exons encode the common cytoplasmic region. These neural cadherin-like cell adhesion proteins most likely play a critical role in the establishment and function of specific cell-cell connections in the brain. Alternative splicing has been described for the gamma cluster genes. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (1) includes the constant region exons and encodes the longest isoform (1).