

## Product datasheet for **SC117606**

### CDH12 (NM\_004061) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CDH12 (NM_004061) Human Untagged Clone
Tag:	Tag Free
Symbol:	CDH12
Synonyms:	CDHB
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_004061, the custom clone sequence may differ by one or more nucleotides

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ATGCTTACAAGGAACTGTTTATCCCTGCTTCTCTGGGTTCTGTTTGTATGGAGGTCTCTAACACCACTAC
AACCCAGCCACAGCAGACTTTAGCCACAGAGCCAAGAGAAAAATGTTATCCATCTGCCAGGACAACGGTC
ACATTTCCAACGTGTTAAACGTGGCTGGGTATGGAATCAATTTTTTGTGCTGGAAGAATACGTGGGCTCC
GAGCCTCAGTATGTGGGAAAGCTCCATTCCGACTTAGACAAGGGAGAGGGCACTGTGAAATACACCCCTCT
CAGGAGATGGCGCTGGCACCGTTTTTACCATTGATGAAACCACAGGGGACATTTCATGCAATAAGGAGCCT
AGATAGAGAAGAGAAACCTTTCTACACTCTTCGTGCTCAGGCTGTGGACATAGAAACCAGAAAGCCCTG
GAGCCTGAATCAGAATTCATCATCAAAGTGCAGGATATTAATGATAATGAGCCAAAGTTTTTGGATGGAC
CTTATGTTGCTACTGTTCCAGAAATGTCTCCTGTGGGTGCATATGTACTCCAGGTCAAGGCCACAGATGC
AGATGACCCGACCTATGGAACAGTGCCAGAGTCGTTTACAGCATTCTTCAGGGACAACCTTATTTCTCT
ATTGATCCCAAGACAGGTGTTATTAGAACAGCTTTGCCAAACATGGACAGAGAAGTCAAAGAACAATATC
AAGTACTCATCCAAGCCAAGGATATGGGAGGACAGCTTGGAGATTAGCCGGAACAACAATAGTCAACAT
CACTCTACCCGATGTCAATGACAATCCACTCGATTTCCCAAAAGCATCTTCCACTTGAAAGTTCCTGAG
TCTTCCCCTATTGGTTCAGCTATTGGAAGAATAAGAGCTGTGGATCCTGATTTTGGACAAAATGCAGAAA
TTGAATACAATATTGTTCCAGGAGATGGGGGAAATTTGTTTGACATCGTCACAGATGAGGATACACAAGA
GGGAGTCATCAAATTGAAAAAGCCTTTAGATTTTGAACAAAGAAGGCATACACTTTCAAAGTTGAGGCT
TCCAACCTTCACTTGGACCACCGGTTTCACTCGGCGGGCCCTTTCAAAGACACAGCTACGGTGAAGATCA
GCGTGTGGACGTAGATGAGCCACCGGTTTTAGCAAGCCGCTCTACACCATGGAGGTTTATGAAGACAC
TCCGGTAGGGACCATCATTGGCGCTGTCACTGCTCAAGACCTGGATGTAGGCAGCAGTGTGTTAGGTAC
TTCATAGATTGGAAGAGTGTGGGGACAGCTACTTTACAATAGATGGAATGAAGGAACCATCGCCACTA
ATGAATTAAGTACAGAGAAAGCACTGCGCAGTATAATTTCTCCATAATTGCGAGTAAAGTTAGTAACCC
TTTATTGACCAGCAAAGTCAATATACTGATTAATGTCTTAGATGTAATGAATTTCTCCAGAAATATCT
GTGCCATATGAGACAGCCGTGTGTGAAAATGCCAAGCCAGGACAGATAATTAGATAGTCAAGTGTGCGAG
ACCGAGATCTTTCACCTGCTGGGCAACAATTTCTCTTTAGATTATCACCTGAGGCTGCTATCAAACCAAA
TTTTACAGTTCGTGACTTCAGAAACAACACAGCGGGGATTGAAACCCGAAGAAATGGATACAGCCGAGG
CAGCAAGAGTTGATTTCTCCCTGTTGTAATAGAAGACAGCAGTACCCTGTCCAGAGCAGCACAAACA
CAATGACTATTCGAGTCTGTAGATGTGACTCTGATGGCACCATCCTGTCTTGAATGTGGAAGCAATTTT
TCTACCTGTAGGACTTAGCACTGGGGCGTTGATTGCAATTCTACTATGCATTGTTATACTCTTAGCCATA
GTTGTAAGTGTATGTAGCACTGCGAAGGCAGAAGAAAAAGACACCCTGATGACCTCTAAAGAAGACATCA
GAGACAACGTCATCCATTACGATGATGAAGGAGGTGGGGAGGAAGATACCCAGGCTTTCGACATCGGGGC
TCTGAGAAACCCAAAAGTATTGAGGAGAAACAAAATTCGCAGGGATATAAAACCAGACTCTCTGTTTAA
CCTCGTCAGAGACCACCCATGGAAGATAACACAGACATAAGGGATTTTCATTCATCAAAGGCTACAGGAAA
ATGATGTGGATCCAACCTGCCCCACCATACGATTCACTGGCCACATATGCCTACGAAGGGAGTGGGTCCGT
GGCAGAGTCCCTCAGCTCTATAGACTCTCTACCACAGAAGCCGACCAGGACTATGACTATCTGACAGAC
TGGGGACCCCGCTTAAAGTCTTGGCAGACATGTTTGGCGAAGAAGAGAGTTATAACCCTGATAAAGTCA
CTTAA
```

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_004061 unedited  
 NGGGTCATATATTTGTATACGACTCACTATAGGCGGCCGCGNAATTCGCACGAGGCTTTA  
 TCCGGGTGACTGCATGGCACTGAATTTCTGCATTGAAAGTTCTAACTGACTAAACTGACA  
 TTCTGCACTGCAGCAAGTGACTGTGTCAGGAAAAGCTTAATTTATAAGCAAGTTTCCTGG  
 AGTGAAAACGGCGTTGGAGATAATGATATCTCAGGGCAATTTCTCTGAAATACATTCAT  
 TCTGCCTTGTATCCAGAGAAAAATAAAGGGAACATGAAAAGATAGTTAATTTCTCATT  
 ACCTTTTAAATAATCTATTTGGAGAGTTGTGCATTGCCAAGGCCCTTTAGATGGAATAT  
 AATACAGCAGAAGCCTTTTCATCAAAAAGGATTAATGCCTGCATCATCATTCTGCAATAA  
 AACAAAGAGCTAAGTGGTGGAGGCCACAGACACCTCAAACCTGGATTCCACAATTCTACG  
 TTAAGTGTGGAGTTTTTATTACTCTGCTGTAGGAAAAGCCTTTGCCAATGCTTACAAGGA  
 ACTGTTTATCCCTGCTTCTCTGGGTTCTGTTTGTGGAGGTCTCCTAACACCACTACAAC  
 CACAGCCACAGCAGACTTTAGCCACAGAGCCAAGAGAAAATGTTATCCATCTGCCAGGAC  
 AACGGTCACATTTCCAACGTGTTAAACGTGGCTGGGTATGGAATCAATTTTTGTGCTGG  
 AAAGATACGTGGGCTCCGAGCCTCAGTATGTGGAAAAGCTCCATTCGACTTAGACAAGG  
 NAGAGGNCACACTGTGAAATACACCCTCTCCAGAGATGCGCTGGCACCGTTTTTACATTGAT  
 GAAACACAGGGGACATTCATGCCATTAAGAGCCTAGATAGAGAAGAGAAACTTCT

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_004061 unedited  
 GCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTCTTTCTTTTTTTTTTTGGAAAAGAAAG  
 TAACATTTTAATGAACAGCTTTAATGTGAACATAATGTTAAGATCAAACATTGTTTCTAGA  
 ATTTGGGACTTACATATTGAACCTTGATATTTTCATATTTATTTCAATTTTCTGAAAGGAT  
 AGGATAAACAAAACGTTTTAGCATACAGTTTAAAAAGAAAAAGAAAACCTTTTGAATT  
 AGAAGAAGGTGGAGATCAGAAAAGTGTCTCTTTTGTCTCAAAAAGGAATGAGGAGAGTC  
 AGAGTGTGCGTATTGCTTCTTGACATAAAGACGGAGTCTGTTTTATGTCTTTATCTCTGA  
 ATCCCAGCAATACCATCACAGCAGAGTGTACTGTACACCACTTTAAATGATAAGAGTTTCA  
 ATAGGCACTTTAGTGGAATTAAGAAAAATCAACACTCTTCCACCGTGATGCCACATAGC  
 TATCTTCGTTCTAGGTTGCATGTCAAGTAAATTGATTGAATAGGCTGAGCTTGTCTCA  
 GTGTGATTGTGAAAAACAACAAACAAACAAAGCAAGTCACATTATAGGATGTATCTC  
 GGTAATCAAAGGAATCTGTCCAAAAAATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT  
 TGTGTGTGTGTGTGTCTAAAAAAAATTTCTATTAATATTTGGGGTTTCTTTTCTCTT  
 TTTAAAAAACCTCCCTCTCGGGTGTATTTAGCCTNCACGACTNCCTTAGTGACTTTACAA  
 GGGTATTACTCTTCTTTCGNCAACATGTCTGCCAAGACTTAAAGCGGGTCCCCAGTCTG  
 CAGATATNCATAGCCTGGCCGGTTTGGGGGAGAAGAGTCTTAGAGCTGAGGACTCTGCAC  
 GGACCACTCCCTTAGCTATGTGCATAATCNTTGTGGGGCATTGGCCCCA

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_004061

**Insert Size:**

3850 bp

**OTI Disclaimer:** 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 [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

**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\\_004061.2](#), [NP\\_004052.2](#)

**RefSeq Size:** 4164 bp

**RefSeq ORF:** 2385 bp

**Locus ID:** 1010

**UniProt ID:** [P55289](#)

**Cytogenetics:** 5p14.3

**Domains:** Cadherin\_C\_term, CA

**Protein Families:** Transmembrane

**Gene Summary:**

This gene encodes a type II classical cadherin of the cadherin superfamily. Alternative splicing of this gene results in multiple transcript variants. At least one of these variants encodes a preproprotein that is proteolytically processed to generate the mature cadherin protein. These integral membrane proteins mediate calcium-dependent cell-cell adhesion and are composed of a large N-terminal extracellular domain, a single membrane-spanning domain, and a small, highly conserved C-terminal cytoplasmic domain. Type II (atypical) cadherins are defined based on their lack of a histidine-alanine-valine (HAV) cell adhesion recognition sequence specific to type I cadherins. This particular cadherin appears to be expressed specifically in the brain and its temporal pattern of expression would be consistent with a role during a critical period of neuronal development, perhaps specifically during synaptogenesis. [provided by RefSeq, Nov 2015]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1). Variants 1, 2, and 4-8 all encode the same isoform (1).