

## Product datasheet for **MG227582**

### **Cdh3 (NM\_001037809) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Cdh3 (NM_001037809) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cdh3
Synonyms:	AI385538; Ca; Cadp; Cdhp; P-cad; P-cadherin; Pc; Pcad
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MG227582 representing NM\_001037809  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAGCTTCTTAGTGGCCTCACGCCCTCCTGCTCCTCTGCTCCAGGTTTGCTGGCTACGCAGCGTGG  
 TCTCCGAGCCCTACCGAGCGGGCTTCATCGGGGAGGCTGGAGTGACCTTGAGAGTGAAGGAACTGACCT  
 GGAGCCGAGCCAAGTTCTGGGAAAGTAGCCTTGCCGGACAGGGCATGCACCATGCAGACAATGGAGAC  
 ATCATTATGCTGACTAGGGGACAGTTCAGGGAGGGAAGGATGCGATGCACTCCCCACCCACCCGCATCT  
 TAAGGAGACGAAAGAGAGAGTGGGTGATGCCACCAATATTCGTCCTCCGAGAATGGCAAGGGTCCCTTCCC  
 TCAGAGGCTGAATCAGCTCAAATCTAATAAGGACAGAGGCACCAAGATTTTCTACAGCATCACAGGGCCT  
 GGGCAGACAGTCCCCCGAAGGAGTCTCACCATAGAGAAGGAGTCGGGCTGGCTGTTGTTGCATATGC  
 CACTGGACAGGGAGAAGATTGTCAAGTACGAGCTTTATGGCCACGCTGTATCTGAGAATGGTGCCTCTGT  
 AGAGGAGCCCATGAACATATCCATCATTGTGACAGACCAGAATGACAACAAGCCCAAGTTCACTCAAGAC  
 ACCTTCAGAGGGAGTGTCTGGAGGGAGTAATGCCTGGCACTTCTGTGATGCAGGTGACAGCCACAGATG  
 AGGACGATGCTGTCAACACTTACAATGGGGTGGTGGCTTACTCCATCCATAGCCAAGAGCCGAAGGAGCC  
 ACACGACCTCATGTTACCATCCATAAAAGCACGGGAACCATAGCGTCATATCCAGTGGCCTGGACCGA  
 GAGAAAGTCCCTGAGTACAGACTGACCGTCCAGGCCACAGACATGGATGGAGAGGGCTCTACCACGACGG  
 CAGAGGGCCGTTGTGCAATCCTTGATGCCAACGATAACGCTCCGGAGTTTGAGCCGAGAAGTATGAGGC  
 TTGGGTGCCTGAGAACGAAGTGGCCATGAGGTACAGAGGCTGACAGTACTGATCTCGATGTCCCAAC  
 TCGCCAGCGTGGCGTCCACCTACCACATCGTGGGAGGTGATGATGGGGACCATTCACCATCACCCTC  
 ACCCAGAGACCAACCAAGCGCTCCTGACAACCAAGAAGGGTTTGGATTTTGAGGCTCAGGACCAACACAC  
 CCTGTATGTAGAAGTGACCAACGAGGCTCCCTTTGCAAGTGAAGCTCCCGACAGCCACTGCCACCGTGGTG  
 GTCATGTGAAAGATGTCAACGAAGCCCTGTGTTTGTCCACCTTCCAAGGTCATTGAGGCCAGGAAG  
 GCATCTCTATTGGGGAAGTGGTCTGCATCTATACCGCACAGGACCCAGACAAGGAGGACCAGAAGATCAG  
 CTACACCATCTCGAGAGATCCAGCCAAGTGGCTTGTGTTGGACCCAGACAGTGGTCAAGTAACTGCCGCA  
 GGCATCTTGATCGTGGAGCAGCAGTTTGTGAAAAACAATGTCTACGAAGTCAAGTGGTTTGGCCACAG  
 ACAGTGGAAACCTCCCACCACCGGCACTGGGACCCTCCTGCTTACACTTACTGACATCAACGACCATGG  
 CCCGATCCCTGAACCCAGGCAGATCATCTGTAAACCAAGCCCTGTGCCTCAAGTGTGAACATCACT  
 GACAAGGACCTGTCCCCAACTCCTCCCTTTCCAGGCCAGCTAACACATGACTCAGATATCTACTGGA  
 TGGCAGAAGTCAAGGAGAAAGGAGACACCGTGGCCTTGTCCCTGAAGAAGTTCCTGAAACAAGACACGTA  
 TGACTTGATCTTTCTTTGTCTGACCATGGCAACAGGGAACAGCTAACCATGATCAGGGCCACTGTGTGT  
 GACTGCCATGGCCAAGTGTCAATGACTGCCCCAGACCCTGGAAGGGTGGTTTTCATCCTCCCCTCCTGG  
 GTGCTGTCTGGCACTGCTGACCCTTCTACTGGCACTCCTCCTGTTGGTGGAGGAAGAAGAGGAAAGTCAA  
 AGAGCCCTTCTGCTCCAGAAAGATGACACGCGAGACAATGTCTTCTATTATGGAGAAGAGGGTGGTGGT  
 GAAGAGGACCAGGACTATGACATCACCAACTCCACCGGGGACTGGAGGCCAGGCCTGAGGTGGTTCTCC  
 GAAACGATGTAGTGCCAACTTCATCCCCACCCCATGTACCGACCCCGCCGCCAACCCAGATGAAAT  
 CGGGAACCTTCATCATCGAGAACCTGAAGGCTGCCAACACTGACCCTACTGCCCGCCCTACGACTCCCTG  
 CTGGTTTTTACTACGAGGGCAGCGGCTCTGATGCCGCTCCCTGAGCTCCTCACCACCTCCGCTCCG  
 ACCAGGATCAGGACTACAACCTTAAACGAGTGGGGAAGTCGATTCAAGAACTGGCGGACATGTATGG  
 TGGCGGTGAGGATGAC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

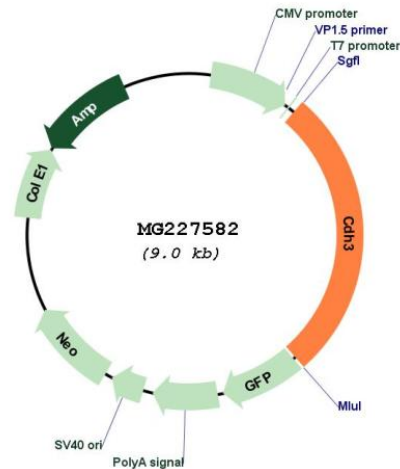
**Protein Sequence:** >MG227582 representing NM\_001037809  
Red=Cloning site Green=Tags(s)

MELLSGPHAFLLLLLQVCWLRVSVSEPYRAGFIGEAGVTLEVEGTDLEPSQVLGKVALAGQGMHHADNGD  
IIMLTRGTVQGGKDAMHSPPTRILRRRKREWVMPPIFVPENKGPFPQRLNQLKSNKDRGTFKIFYSITGP  
GADSPPEGVFTIEKESGWLLLHMPLDREKIVKYELYGHAVSENGASVEEPMNISIIIVTDQNDNKPKFTQD  
TFRGSVLEGVMPGTSVMQVTATDEDDAVNTYNGVVAYSIIHSQEPKEPHDLMFTIHKSTGTISVISSGLDR  
EKVPEYRLTVQATDMDGEGSTTTAEAVVQILDANDNAPEFEPQKYEAWVPENEVGHEVQRLTVTDLDVFN  
SPAWRATYHIVGGDDGDHFTITTHPETNQGLTTKKGLDFEAQDQHTLYVEVTNEAPFAVKLPTATATVV  
VHVKDVNEAPVFPVPSKVIEAQEGISIGELVCIYTAQDPDKEDQKISYTI SRDPANWLA VDPDSGQITAA  
GILDREDEQFVKNNVYEVMLATDSGNPPTTGTGTLTLLTLDINDHGPIPEPRQIIICNQPVPQVLNIT  
DKDLSPNSSPFQAQLTHSDIYWMAEVSEKGDVALSLKKFLKQDQTYDLHLSLSDHGNREQLTMIRATVC  
DCHGQVFND CPRPWKGGF ILPILGAVLALLTLLALLLVRKKRKYKEPLLLPEDDTRDNV FYYGEEGGG  
EEDQDYDITQLHRGLEARPEVLRNDVVPTF IPTPMYRPRPANPDEIGNFIIENLKAANTDPTAPPYDSL  
LVFDYEGSGS DAASLSSLTTSASDQDQDYNLNEWGSRFKKLADMYGGGEDD

TRTRPLE - GFP Tag - V

**Restriction Sites:** Sgfl-MluI



**Plasmid Map:**


**ACCN:** NM\_001037809

**ORF Size:** 2466 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](#)

**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\\_001037809.4](#), [NP\\_001032898.1](#)

RefSeq Size: 3973 bp

RefSeq ORF: 2469 bp

Locus ID: 12560

UniProt ID: [P10287](#)

Cytogenetics: 8 53.16 cM

**Gene Summary:** This gene encodes a calcium-dependent cell-cell adhesion protein containing five cadherin domains. The encoded protein plays a role in epithelial outgrowth, such as that which occurs during the development of hair follicles and limb buds. Loss of function of the related gene in humans results in ectodermal dysplasia, ectrodactyly, and macular dystrophy and congenial hypotrichosis with juvenile macular dystrophy. This gene is located in the vicinity of similar cadherin genes on chromosome 8. The proprotein is further cleaved into a functional chain. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2013]