

Product datasheet for **RG217458**

cadherin 10 (CDH10) (NM_006727) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	cadherin 10 (CDH10) (NM_006727) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	cadherin 10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RG217458 representing NM_006727
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACAATACATCAATTTTTGCTACTGTTTCTATTCTGGGTATGCCTGCCACATTCTGCTCTCCAGAAA
 TAATGTTCCAGAAGGACGCTGTGCCACAGCAAAGAATTTAAGTTCACGTGTACCAAGGAGTGATGGCAA
 AATTCTCCATCGTCAAAAACGTGGTTGGATGTGGAATCAATTTTTCTTACTTGAAGAATATACAGGATCT
 GATTATCAGTACGTAGGCAAGCTACATTACAGCAAGATAAAGGAGATGGATCAAAATATATCTTAT
 CTGGAGATGGAGCTGGTACTCTTTTTATTATTGATGAAAAACAGGTGATATTCATGCCACAAGGCGAAT
 TGATAGGGAGGAAAAGGCCTTTTATACTCTACGCGCACAGCTATTAACAGAAGAACTCTGAGGCCAGTA
 GAGCCAGAGTCAGAGTTTGATCAAAATTCATGATATCAATGACAATGAGCCAACGTTCCAGAGAAGAAA
 TCTATACAGCTAGTGTCCCGAAATGTCTGTTGTAGGTACTTCTGTGGTCAAGTCACAGCTACAGATGC
 CGATGACCCTTCATATGGGAACAGCGCCAGAGTCATTTACAGCATACTTCAAGGGCAGCCCTATTTCTCT
 GTGGAGCCTGAAACAGGTATCATCAGGACTGCTTTACCGAACATGAACAGAGAAAACAGAGAGCAATACC
 AAGTGGTCATCCAGGCCAAAGACATGGGCGGCCAGATGGGAGGCTTATCGGGGACAACCACTGTGAACAT
 CACGCTGACAGATGTCAATGACAACCCACCACGTTTCCCCAGAACAATTTATCTTCTCGAGTTCTTGAA
 TCCTCCCCAGTTGGCACAGCCATTGGAAGTGCAAGCAACTGATGCTGACACTGGGAAAAATGCTGAAG
 TAGAATACCGAATTATTGATGGTGACGGTACTGATATGTTTGACATCGTGACTGAGAAGGACACACAGGA
 AGGCATCATCACTGTGAAAAAGCCACTCGACTATGAGAGCCGAAGACTTTATACTCTGAAAGTCGAAGCA
 GAAAACACCCATGTAGATCCCCGTTTTTATTACCTAGGACCATTAAAGATACTACCATAGTGAAAAATCT
 CTATAGAAGATGTGGATGAACCTCCTGTTTTAGTAGGTCCTCTATCTGTTTGAAGTTCATGAAGATAT
 TGAAGTGGGCACAATCATTGGTACTGTAATGGCAAGGGACCCAGATTCTATTTCCAGCCCCATTAGATTT
 TCCTTGGATCGCCATACTGACCTTGACAGAATCTTTAACATTCAATCAGGAAATGGATCTCTTTATACAT
 CAAAACCTCTTGACCGTGAACATCTCAGTGGCATAATCTTACTGTTATTGCTGCTGAAATCAACAATCC
 CAAAGAGACAACACGCGTGGCTGTTTTGTGAGAATTTTGGATGTTAATGACAATGCCCCACAGTTTGCT
 GTGTTCTATGACACTTTTGATGTGAAAATGCCAGACCAGGGCAGCTAATACAGACTATAAGTGCAGTAG
 ACAAAGATGACCCTTTAGGTGGACAGAAATTTTTTTTTCAGTTTAGCTGCTGTCAATCCAACTTCACAGT
 ACAGGATAATGAAGATAATACTGCCAGAATCTTAACCAGAAAAAATGGATTCAATAGACATGAAATCAGT
 ACCTATCTCTTGCTGTGGTGATATCAGACAATGATTACCCAATTCAGAGCAGCACAGGCACACTGACCA
 TTCGAGTGTGTGCTTGTGACAGCCAAGGCAACATGCAATCCTGCAGTGCTGAAGCCCTGCTCCTCCCTGC
 CGGCCTCAGCACTGGGGCCTTGATCGCCATCCTCCTCTGCATCATCATTCTACTGGTTATAGTAGTACTG
 TTTGCAGCTCTGAAAAGACAGCGAAAAAAGAGCCTCTGATCTTGTCAAAAGAAGATATCAGAGACAACA
 TTGTGAGCTATAACGATGAGGGTGGTGGAGAGGAGGACACCCAGGCCCTTGATATCGGCACCCTGAGGAA
 TCCTGCAGCCATTGAGGAAAAAAGCTCCGGCGAGATATTATCCAGAAACGTTATTTATTCCTCGGAGG
 ACTCCTACAGCTCCAGATAACACGGACGTCCGGGATTTTCAATGAAGGCTAAAAGAGCATGATCTTG
 ACCCCACCGCACCCCTACGACTCACTTGCAACCTATGCCTATGAAGGAAATGATTCCATTGCTGAATC
 TCTGAGTTCATTAGAATCAGGTACTACTGAAGGAGACCAAACTACGATTACCTCCGAGAATGGGGCCCT
 CGGTTTAATAAGCTAGCAGAAATGTATGGTGGTGGGAAAGTGACAAAGACTCT

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

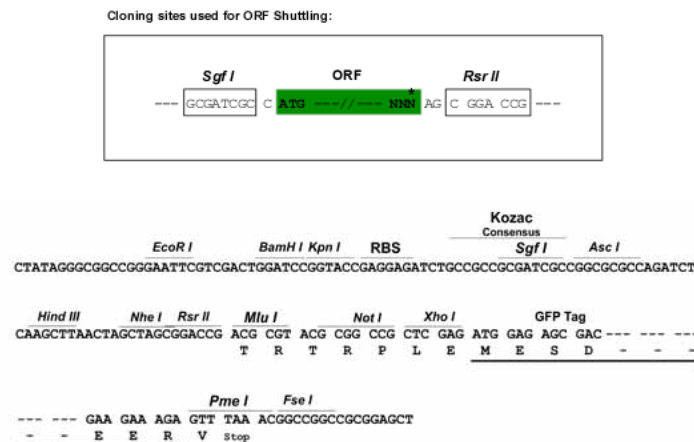
Protein Sequence: >RG217458 representing NM_006727
Red=Cloning site Green=Tags(s)

MTIHQFLLLFLFWCLPHFCSP EIMFRTPVPQQRILSSRVPRSDGKILHRQKRGWMWNQFFLLEETGS
DYQYVGKLHSDQDKDGLSKYILSGDGAGTLFIIDEKTGDIHATRRIIDREEKAFYTLRAQAINRRTL RPV
EPESEFVIKIHDINDNEPTFPEEIYTASVPEMSVVGTSVVQVTATDADDPSYGNSARVIYSILQGQPYFS
VEPETGIIRTALPNMNRNREQYQVVIQAKDMGGQMGGLSGTTT VNITLTDVNDNPPRFPQNTIHLRVLE
SSPVGTAGSVKATDADTGKNAEVEYRIIDGDTDMFDIVTEKDTQEGII TVKKPLDYESRRLYTLKVEA
ENTHVDPRFYYPGPKDITIVKISIEDVDEPPVFSRSSYLFEVHEDIEVGTIIGTVMARDPDISSPIRF
SLDRHTDLDRIFNIHSGNGSLYTSKPLDRELSQWHNLTVIAAEINNP KETTRVAVFVRILDVNDNAPQFA
VFYDTFVCENARPGQLIQTISAVDKDDPLGGQKFFSLA AVNPNTVQDNEDNTARILTRKNGFN RHEIS
TYLLPVVISDNDYPIQSSTGTLTIRVCACDSQGNMQSCSAEALLLPAGLSTGALIAILL CIIILLVIVVL
FAALKRQRKKEPLILSKEDIRDNI VSYNDEGGGEEDTQAFDIGTLRNPA AIEEKKLRDIIPETLFI PRR
TPTAPDNTDVRDFINERLKEHDLPTAPPYDSLATYAYEGNDSIAESLSSLESGTTEGDQNYDYLREWGP
RFNKLAEMYGGGESDKDS

SGPTRRRLE - GFP Tag - V

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_006727

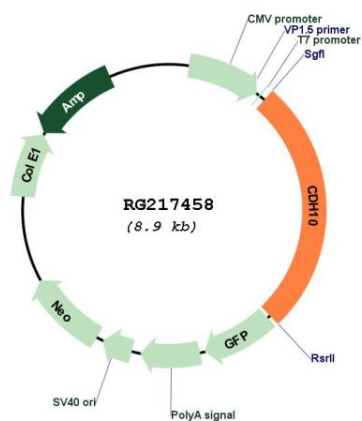
ORF Size: 2364 bp

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:	<u>NM_006727.5</u>
RefSeq Size:	3261 bp
RefSeq ORF:	2367 bp
Locus ID:	1008
UniProt ID:	<u>Q9Y6N8</u>
Cytogenetics:	5p14.2-p14.1
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. The extracellular domain consists of 5 subdomains, each containing a cadherin motif, and appears to determine the specificity of the protein's homophilic cell adhesion activity. 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 is predominantly expressed in brain and is putatively involved in synaptic adhesions, axon outgrowth and guidance. Mutations in this gene may be associated with lung squamous cell carcinoma and colorectal cancer in human patients. [provided by RefSeq, Nov 2015]

Product images:



Circular map for RG217458