

Product datasheet for **RC231183**

cadherin 10 (CDH10) (NM_001190450) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	cadherin 10
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-Entry (PSI00001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence: >RC231183 representing NM_001190450
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GGATCGCC**

ATGCTGGGATTACAGCCACGAGCCATCGTGCATGAGCCAGCCAGAAATGCATCTCTTTATGTGAGAACTT
TGATGCTGTTGATTTAGCATTATAGCAAAGACAATCCCAAAGAGACAACACGCGTGGCTGTTTTGT
GAGAATTTTGGATGTTAATGACAATGCCCCACAGTTTGTGTGTTCTATGACACTTTTGTATGTGAAAAT
GCCAGACCAGGGCAGCTAATACAGACTATAAGTGCAGTAGACAAAGATGACCCCTTATAGGTGGACAGAAAT
TTTTTTTCAGTTTAGCTGTCAATCCAACTTCACAGTACAGGATAATGAAGATAATACTGCCAGAAT
CTTAACCAGAAAAATGGATTCAATAGACATGAATCAGTACCTATCTCTGCCTGTGGTGATATCAGAC
AATGATTACCCAATTCAGAGCAGCACAGGCACACTGACCATTGAGTGTGTGCTTGTGACAGCCAAGGCA
ACATGCAATCCTGCAGTGTGAAGCCCTGCTCCTCCCTGCCGCCCTCAGCACTGGGGCCTTGATCGCCAT
CCTCCTCTGCATCATCTTCTACTGGTTATAGTAGTACTGTTTGCAGCTCTGAAAAGACAGCGAAAAAA
GAGCCTCTGATCTTGTCAAAAGAAGATATCAGAGACAACATTGTGAGCTATAACGATGAGGGTGGTGAG
AGGAGGACACCCAGGCCTTTGATATCGGCACCCTGAGGAATCCTGCAGCCATTGAGGAAAAAAGCTCCG
GCGAGATATTATCCAGAAACGTTATTTATTCCTCGGAGGACTCCTACAGCTCCAGATAACACGGACGTC
CGGGATTTTCATTAAAGAGGCTAAAGAGCATGATCTTGACCCACCGCACCCTTACGACTCACTTG
CAACCTATGCCTATGAAGGAATGATTCCATTGCTGAATCTCTGAGTTCATTAGAATCAGGTACTACTGA
AGGAGACCAAACTACGATTACCTCCGAGAATGGGGCCCTCGGTTTAATAAGCTAGCAGAAATGTATGGT
GGTGGGAAAGTGACAAAGACTCT

AG**CGGACCG**ACGCGTACGCGCGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA



Protein Sequence:

>RC231183 representing NM_001190450

Red=Cloning site Green=Tags(s)

MLGLQPRAIIVHEPARNASLYVRTLMLLISAFIAKDNPKETTRVAVFVRILDVNDNAPQFAVFYDTFCEN
ARPGQLIQTISAVDKDDPLGGQKFFFLAAVNPNTVQDNEDNTARILTRKNGFNRHEISTYLLPVVISD
NDYPIQSSTGTLTIRVCACDSQGNMQSCSAEALLPAGLSTGALIAILLCIIILLVIVVLFALKRQRKK
EPLILSKEDIRDNIYSYNDGGGEEDTQAFDIGTLRNPAIEEKLRDIIPETLFIPTPTAPDNTDV
RDFINERLKEHDLPTAPPYDSLATYAYEGNDSIAESLSSLESGTTEGDQNYDYLREWGPRFNKLAEMYG
GGESDKDS

SGPTRRRLEQKLISEEDLAANDILDYKDDDDKV

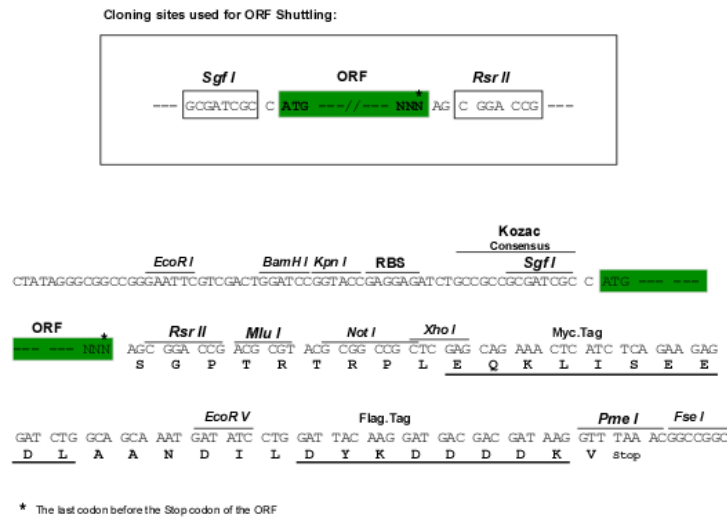
Chromatograms:

https://cdn.origene.com/chromatograms/mk8054_b12.zip

Restriction Sites:

SgfI-RsrII

Cloning Scheme:



ACCN:

NM_001190450

ORF Size:

1074 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:

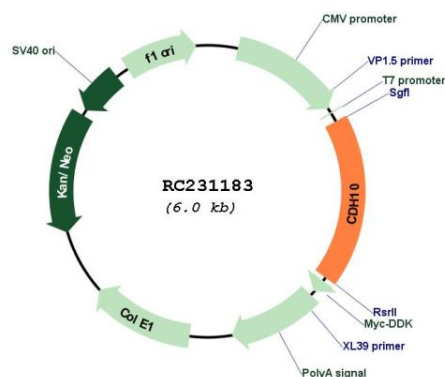
This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components:

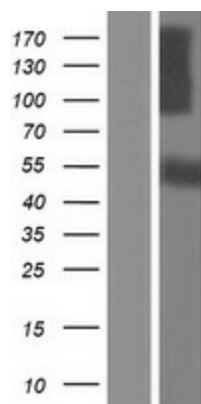
The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_001190450.1, NP_001177379.1</u>
RefSeq ORF:	1076 bp
Locus ID:	1008
Cytogenetics:	5p14.2-p14.1
Protein Families:	Transmembrane
MW:	40.2 kDa
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 RC231183



Western blot validation of overexpression lysate (Cat# [LY434182]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC231183 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).