

Product datasheet for **RC210970**

R Cadherin (CDH4) (NM_001794) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	R Cadherin (CDH4) (NM_001794) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	R Cadherin
Synonyms:	CAD4; R-CAD; RCAD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC210970 representing NM_001794
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGACCGCGGGCCGGCGTCTCCTTCTGCTGCTCTCGTCTCCGGCGCGCTCCGGGCCATAATGAGG
 ATCTTACAAC TAGAGAGACCTGCAAGGCTGGTCTCTGAAGATGATTACACGGCATTAACTCCCAAAA
 TATTCTAGAAGGGGAAAAGCTACTTCAAGTCAAGTTCAGCAGCTGTGTGGGGACCAAGGGACACAATAT
 GAGACCAACAGCATGGACTTCAAAGTTGGGGCAGATGGGACAGTCTTCGCCACCCGGGAGCTGCAGGTCC
 CCTCCGAGCAGGTGGCGTTCACGGTACTGATGGGACAGCCAGACAGCAGAGAAATGGGACGCCGTGGT
 GCGGTTGCTGGTGGCCAGACCTCGTCCCGCACTCTGGACACAAGCCGAGAAAGGAAAGAAAGTCTGT
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 TCGCGTGGATGAGCGGCCGTGGCGCTGAGCCCCAGTACCCGATCAGGCCCATGGTGGCGACCCAGGC
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 GGAGGTGGTGAAGAGGAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGAT AAGGTTTAA

Protein Sequence: >RC210970 representing NM_001794
 Red=Cloning site Green=Tags(s)

MTAGAGVLLLLLSL SGALRAHNEDLTTRETCKAGFSEDDYTALISQNI LEGEKLLQVKFSSCVGKTGTQY
 ETNSMDFKVGADGTVFATRELQVPSEQVAFVTAWDSQTAEKWDVAVRLLVAQTSSPHSGHKPQKGGKVV
 ALDPSPPKD TLLPWPQHQNANGLRRRKRDRWVIPPINVPENSRGPFPPQLV RIRSDKDNDIPIRYSITGV
 GADQPPMEVFSIDSMSGRMYVTRPMDREEHASYLRAHAVDMNGNKVENPIDLYIYVIDMNDNRPEFINQ
 VYNGSVDEGSKPGTYVMTVTANDADDSTTANGMVRYRIVTQTPQSPSQNMFTINSETGDI VTVAAAGLDRE
 KVQYTYIVQATDMEGNLNYGLSNTATAITVTDVNDNPPEFTASTFAGEVPENRVETVVANLTVMDRDQ
 PHSPNWNNAVYRIISGDPSGHF SVRTDPVTNEGMVTVVKAVDYELNRAFMLTVMVSNQAPLASGIQMSFQS
 TAGVTISIMDINEAPYFPSNHKLIRLEEGVPPGTVL TTFSAVDPDRFMQQAVRYSKLSDPASWLHINATN
 GQITTAAVLDRESLYTKNNVYEATFLAADNGIPPASGTGLQIYLIDINDAPELLPKEAQICEKPNLNA
 INITAADADVDPNIGPYVFELPFVPAAVRKNWTITRLNGDYAQLSLRILYLEAGMYDVPIIVTDSGNPPL
 SNTSIIKVKVCPDDNGDCTTIGAVAAAAGLTGAIVAILICILILLTMVLLFVMW MKRREKERHTKQLLI
 DPEDDVRDNILKYDEEGGGEEDQDYDLSQLQQPEAMGHVPSKAPGVRRVDERPVGAE PQYIRMPVPHPG
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 GGGEED

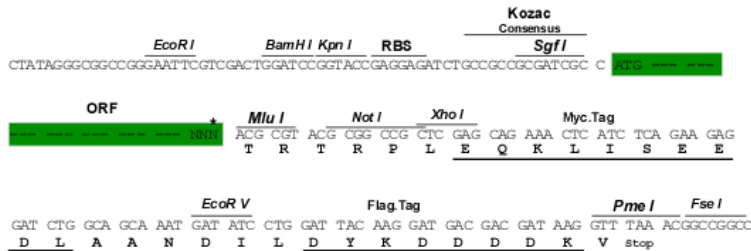
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2482_a09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



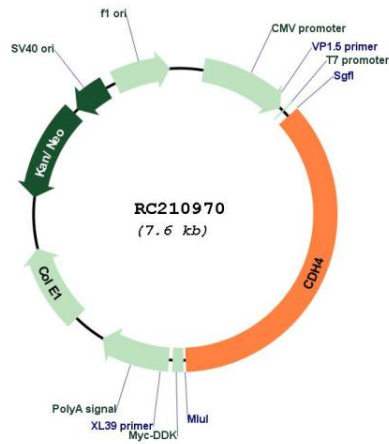
* The last codon before the Stop codon of the ORF

ACCN: NM_001794

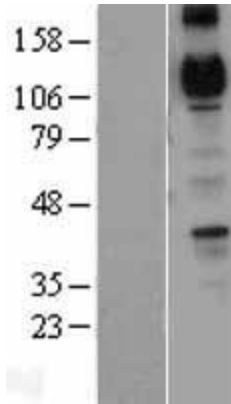
ORF Size: 2748 bp

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:	<ol style="list-style-type: none">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_001794.5
RefSeq Size:	3063 bp
RefSeq ORF:	2751 bp
Locus ID:	1002
UniProt ID:	P55283
Cytogenetics:	20q13.33
Domains:	Cadherin_C_term, CA
Protein Families:	Transmembrane
Protein Pathways:	Cell adhesion molecules (CAMs)
MW:	100.28 kDa
Gene Summary:	This gene is a classical cadherin from the cadherin superfamily. The encoded protein is a calcium-dependent cell-cell adhesion glycoprotein comprised of five extracellular cadherin repeats, a transmembrane region and a highly conserved cytoplasmic tail. Based on studies in chicken and mouse, this cadherin is thought to play an important role during brain segmentation and neuronal outgrowth. In addition, a role in kidney and muscle development is indicated. Of particular interest are studies showing stable cis-heterodimers of cadherins 2 and 4 in cotransfected cell lines. Previously thought to interact in an exclusively homophilic manner, this is the first evidence of cadherin heterodimerization. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2011]

Product images:



Circular map for RC210970



Western blot validation of overexpression lysate (Cat# [LY400684]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210970 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).