

Product datasheet for **RC207170**

N Cadherin (CDH2) (NM_001792) Human Tagged ORF Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | N Cadherin (CDH2) (NM_001792) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | N Cadherin |
| Synonyms: | ACOGS; ARVD14; CD325; CDHN; CDw325; NCAD |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



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ORF Nucleotide Sequence:

>RC207170 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTGCCGGATAGCGGGAGCGCTGCGGACCCTGCTGCCGCTGCTGGCGGCCCTGCTTCAGGCGTCTGTAG
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Protein Sequence: >RC207170 protein sequence
Red=Cloning site Green=Tags(s)

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MCRIAGALRLLPLLAALLQASVEASGEIALCKTGFPEDVYSAVLSKDVHEGQPLLNVKFSNCNGKRKVQ
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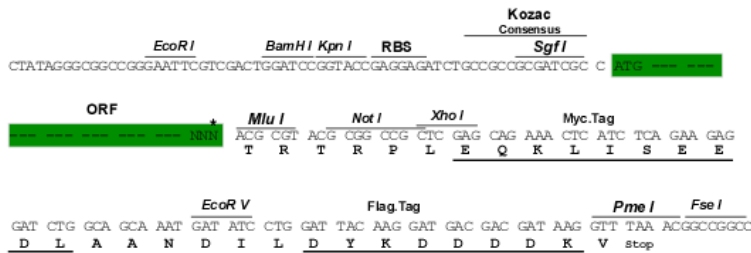
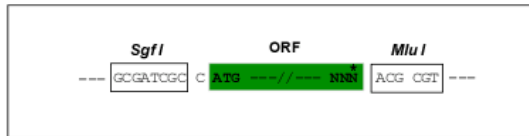
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6340_d08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

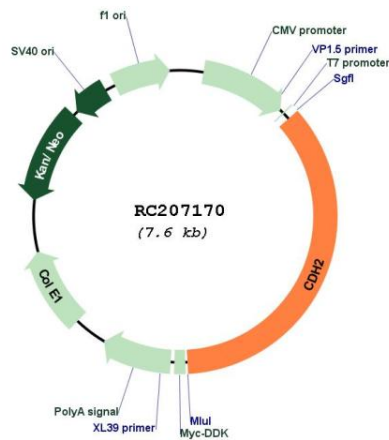


* The last codon before the Stop codon of the ORF

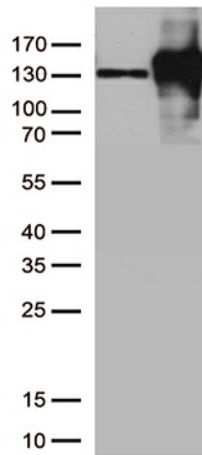
ACCN: NM_001792

| | |
|-------------------------------|---|
| ORF Size: | 2718 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_001792.5 |
| RefSeq Size: | 4380 bp |
| RefSeq ORF: | 2721 bp |
| Locus ID: | 1000 |
| UniProt ID: | P19022 |
| Cytogenetics: | 18q12.1 |
| Domains: | Cadherin_C_term, CA |
| Protein Families: | Druggable Genome, ES Cell Differentiation/IPS, Transmembrane |
| Protein Pathways: | Arrhythmogenic right ventricular cardiomyopathy (ARVC), Cell adhesion molecules (CAMs) |
| MW: | 99.8 kDa |
| Gene Summary: | This gene encodes a classical cadherin and member of the cadherin superfamily. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein is proteolytically processed to generate a calcium-dependent cell adhesion molecule and glycoprotein. This protein plays a role in the establishment of left-right asymmetry, development of the nervous system and the formation of cartilage and bone. [provided by RefSeq, Nov 2015] |

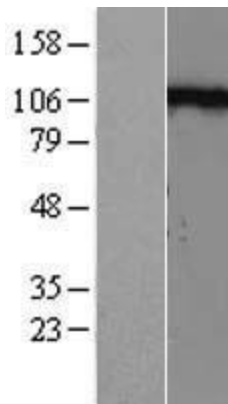
Product images:



Circular map for RC207170



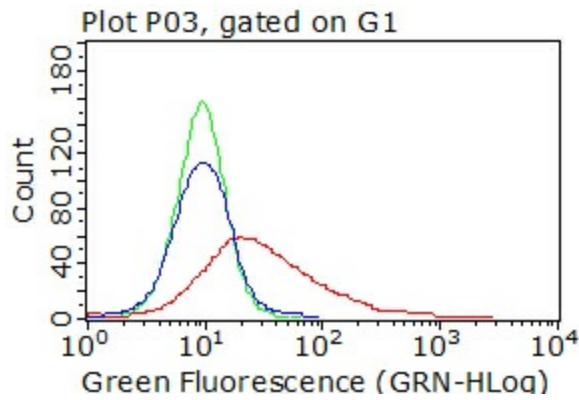
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CDH2 (Cat# RC207170, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CDH2 (Cat# [TA503933]). Positive lysates [LY419743] (100ug) and [LC419743] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY419743]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207170 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CDH2 protein (Cat# [TP307170]). The protein was produced from HEK293T cells transfected with CDH2 cDNA clone (Cat# RC207170) using MegaTran 2.0 (Cat# [TT210002]).



Living HEK293T cells transfected with either RC207170 plasmid (red) or empty vector (blue) were immunostained by anti-CDH2 antibody ([TA503933]) or isotype control antibody (green), and then analyzed by flow cytometry (1:50).