

## Product datasheet for **RC239664**

### alpha 1 Catenin (CTNNA1) (NM\_001290307) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	alpha 1 Catenin (CTNNA1) (NM_001290307) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CTNNA1
Synonyms:	CAP102; MDPT2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>RC239664 representing NM\_001290307  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGACTGCTGTCCATGCAGGCAACATAAACTTCAAGTGGGATCCTAAAAGTCTAGAGATCAGGACTCTGG  
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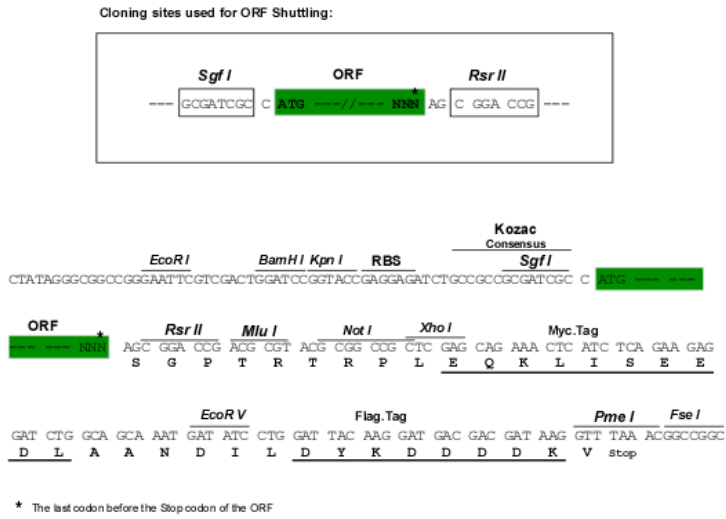
Protein Sequence: >RC239664 representing NM\_001290307  
Red=Cloning site Green=Tags(s)

MTAVHAGNINFKWDPKSLEIRTLAVERLLEPLVTQVTTLVNTNSKGPSNKKRGRSCKAHVLAASVEQATE  
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ALNNFDKQIIVDPLSFSEERFRPSLEERLESIIISGAALMADSSCTRDDRERIVAECAVVRQALQDLLSE  
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DNYEPGVYTEKVL EATKLLSNTVMPRFTEQVEAAVEALSSDPAQPMDENEFIDASRLVYDGI RDIRKAVL  
MIRTP EELDDSD FETEDFDVRSRTSVQTEDDQLIAGQSARAIMAQLPQEQA KAKIAEQVASFQEEKSKLDA  
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P

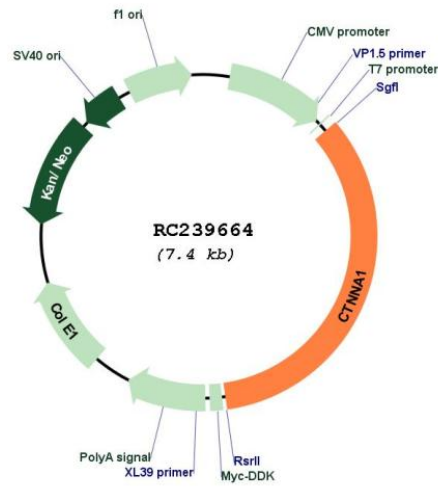
SGP TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-RsrII

Cloning Scheme:



Plasmid Map:



<b>ACCN:</b>	NM_001290307
<b>ORF Size:</b>	2523 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001290307.2</a> , <a href="#">NP_001277236.1</a>
<b>RefSeq Size:</b>	3862 bp
<b>RefSeq ORF:</b>	2526 bp
<b>Locus ID:</b>	1495
<b>UniProt ID:</b>	<a href="#">P35221</a>
<b>Cytogenetics:</b>	5q31.2
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Adherens junction, Arrhythmogenic right ventricular cardiomyopathy (ARVC), Endometrial cancer, Leukocyte transendothelial migration, Pathways in cancer, Tight junction
<b>MW:</b>	93.2 kDa
<b>Gene Summary:</b>	This gene encodes a member of the catenin family of proteins that play an important role in cell adhesion process by connecting cadherins located on the plasma membrane to the actin filaments inside the cell. The encoded mechanosensing protein contains three vinculin homology domains and undergoes conformational changes in response to cytoskeletal tension, resulting in the reconfiguration of cadherin-actin filament connections. Certain mutations in this gene cause butterfly-shaped pigment dystrophy. [provided by RefSeq, May 2016]