

Product datasheet for **RG239595**

alpha 1 Catenin (CTNNA1) (NM_001290309) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	alpha 1 Catenin (CTNNA1) (NM_001290309) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CTNNA1
Synonyms:	CAP102; MDPT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

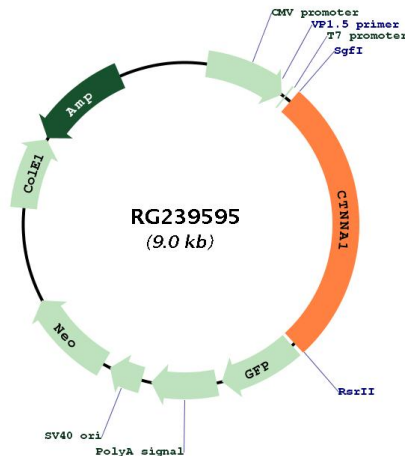
>RG239595 representing NM_001290309.
Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTAGTGAACCGTCAGAATTTTGAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGAAGGCTGCTGCAGGAGAGTTCGCAGATGATCCCTGCTCTTCTGTGAAGCGAGGCAACATGGTTCGG
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TTACTTGTTGAGCTGAAAGTTGTGGAAGATGGTATCTTGAAGTTGAGGAATGCTGGCAATGAACAAGAC
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AGCGGACCCACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
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Protein Sequence: >Peptide sequence encoded by RG239595
Blue=ORF Red=Cloning site Green=Tag(s)

MKAAAGEFADDPCCSVKRGNMVRAARALLSAVTRLLILADMADVYKLLVQLKVVEDGILKLRNAGNEQD
LGIQYKALKPEVDKLNIMAAKRQQLKDVGHRDQMAAARGILQKNVPILYTASQAQLQHPDVAAYKANR
DLIYKQLQAVTGISNAAQATASDDASQHQGGGGELAYALNNFDKQIIVDPLSFSEERFRPSLEERLE
SII SGAALMADSSCTRDRRERIVAECNAVRQALQDLLSEYMGNAGRKERSDALNSAIDKMTKTRDLR
RQLRKAVMDHVSDSFLETNVPLLVLEAAKNGNEKEVKEYAQVFRHANKLIEVANLACSI SNNEGVK
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SHVMGYGFYHFGTYPSTYENPFLHAINNGGYTNTRIEKYEDGGV LHVSFSYRYEAGRVI GDFKVMGTGF
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Restriction Sites: Sgfl-RsrII

Plasmid Map:


ACCN:	NM_001290309
ORF Size:	2409 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).
RefSeq:	NM_001290309.3
RefSeq Size:	3595 bp
RefSeq ORF:	2412 bp
Locus ID:	1495
UniProt ID:	P35221
Cytogenetics:	5q31.2
Protein Families:	Druggable Genome
Protein Pathways:	Adherens junction, Arrhythmogenic right ventricular cardiomyopathy (ARVC), Endometrial cancer, Leukocyte transendothelial migration, Pathways in cancer, Tight junction
MW:	89.1 kDa

Gene Summary:

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]