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Product datasheet for RG208731

CTNNA2 (NM_004389) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CTNNA2 (NM_004389) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CTNNA2
Synonyms:	CAP-R; CAPR; CDCBM9; CT114; CTNR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>RG208731 representing NM_004389
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACTTCGGCAACTTCACCTATCATTCTGAAATGGGACCCCAAAAGTTTGGAAATCCGGACGCTAACAG
TGGAAAGGCTGTTGGAGCCACTTGTTACACAGGTGACTACACTTGTCAACACAAGCAACAAAGGCCCATC
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG208731 representing NM_004389
Red=Cloning site Green=Tags(s)

MTSATSPIILKWDPKSLEIRTLTVERLLEPLVTQVTTLVNTSNKGPSGKKKGRSKKAHVLAASVEQATQN
FLEKGEQIAKESQDLKEELVAAVEDVRKQGETMRIASSEFADDPCSSVKRGTMVRAARALLSAVTRLLIL
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GALKKNATMLYTASQAFLRHPDVAATRANRDYVFKQVQEAIAGISNAAQATSPTDEAKGHTGIGELAAAL
NEFDNKIILDPMTFSEARFRPSLEERLESIISGAALMADSSCTRDDRRERIVAECNAVRQALQDLLSEYM
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FREHANKLVEVANLACSISNNEEGVKLVRMAATQIDSLCPQVINAALTLAARPQSKVAQDNMDVFKDQWE
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CKQDLLAYLQRIALYCHQLNICSKVKAEVQNLGGELIVSGLDSATSLIQAAKNLMNAVVLTVKASYVAST
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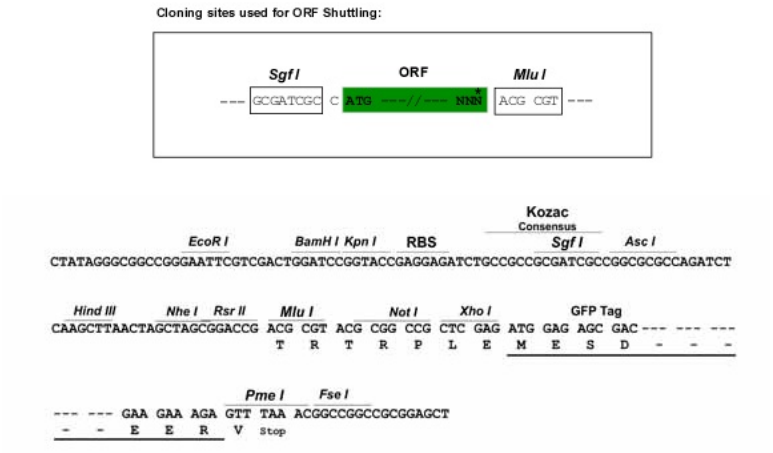
TRTRPLE - GFP Tag - V

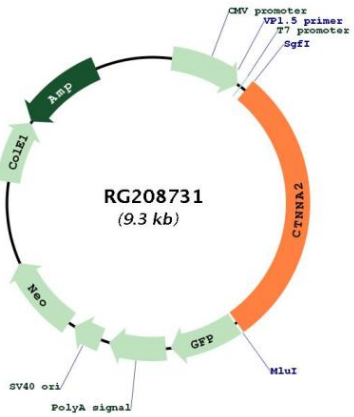
Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN:	NM_004389
ORF Size:	2715 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.
RefSeq:	NM_004389.2, NP_004380.2
RefSeq Size:	3853 bp
RefSeq ORF:	2718 bp
Locus ID:	1496
UniProt ID:	P26232
Cytogenetics:	2p12
Domains:	Vinculin
Protein Families:	Druggable Genome
Protein Pathways:	Adherens junction, Arrhythmogenic right ventricular cardiomyopathy (ARVC), Endometrial cancer, Leukocyte transendothelial migration, Pathways in cancer, Tight junction
Gene Summary:	May function as a linker between cadherin adhesion receptors and the cytoskeleton to regulate cell-cell adhesion and differentiation in the nervous system (By similarity). Required for proper regulation of cortical neuronal migration and neurite growth (PubMed:30013181). It acts as negative regulator of Arp2/3 complex activity and Arp2/3-mediated actin polymerization (PubMed:30013181). It thereby suppresses excessive actin branching which would impair neurite growth and stability (PubMed:30013181). Regulates morphological plasticity of synapses and cerebellar and hippocampal lamination during development. Functions in the control of startle modulation (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG208731