OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RR204610

Cacna1a (NM_012918) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cacna1a (NM_012918) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cacna1a
Synonyms:	BccA1; Cav2.1; rbA-1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RR204610 representing NM_012918 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGCCCGCTTTGGAGACGAGATGCCGGGCCGCTACGGCGCAGGCGGAGGAGGCTCAGGGCCGGCCGCCG GGGTGGTCGTGGGCGCCGCGGGCGGCCGAGGAGCCGGGGGCAGCCGGCAGGGCGGGCAGCCCGGAGCGCA GAGGATGTACAAGCAGTCGATGGCGCAGAGAGCGCGGACCATGGCCCTCTACAACCCCATCCCTGTCCGC CAGAACTGCCTCACGGTCAACCGCTCCCTGTTCCTCTTCAGTGAAGACAACGTGGTGAGAAAATACGCCA AAAAGATCACGGAATGGCCTCCCTTCGAGTACATGATCCTGGCCACCATCATTGCTAACTGCATCGTCCT GGCCCTGGAGCAGCACCTCCCTGATGATGACAAGACACCCATGTCCGAGCGGCTGGATGACACAGAACCC TATTTCATTGGCATCTTCTGTTTTGAGGCTGGAATTAAGATCGTGGCTCTTGGCTTTGCCTTCCACAAAG GCTCCTACCTGAGGAATGGCTGGAACGTCATGGACTTTGTCGTGGTGCTAACAGGCATCTTGGCCACTGT CGGGACGGAGTTTGATCTACGGACACTGAGGGCGGTTCGTGTGCTGCGGCCACTCAAGCTGGTGTCTGGA ATCCCAAGTTTACAAGTCGTCCTGAAGTCAATCATGAAGGCGATGATCCCTCTGCTGCAGATCGGCCTCC TCCTGTTTTTTGCAATCCTTATTTTTGCAATCATAGGGTTAGAATTTTATATGGGAAAATTTCATACCAC CTGCTTTGAAGAGGGGACAGACGACATCCAGGGTGAGTCGCCAGCTCCGTGTGGGACAGAGGAGCCTGCC CGCACCTGCCCCAACGGGACCAAATGTCAGCCGTACTGGGAAGGGCCCAACAACGGCATCACTCAGTTCG ACAACATCCTGTTTGCTGTGCTCACTGTTTTCCAGTGCATCACCATGGAAGGCTGGACTGATCTCCTCTA CAATAGCAACGATGCCTCAGGGAACACTTGGAACTGGTTGTACTTCATCCCCCTCATCATCATCGGCTCC TTTTTTATGCTGAACCTTGTGCTGGGTGTGCTGTCTGGGGAGTTTGCCAAAGAAAGGGAACGTGTAGAGA ACCGAAGGGCTTTTCTGAAGCTCAGAAGACAACAGCAGATTGAACGTGAGCTCAATGGATACATGGAGTG GATCTCGAAAGCAGAAGAGGTGATCCTCGCGGAGGACGAGACAGACGTGGAGCAGAGGCACCCTTTTGAT GGAGCTCTTCGGAGAGCTACTCTGAAGAAAAGCAAGACGGACCTGCTCAACCCTGAGGAGGCGGAGGACC AGCTTGCTGACATCGCGTCTGTGGGGTCTCCCTTCGCCAGAGCCAGCATCAAAAGTGCCAAGCTGGAGAA TTCGACTTTTTTCCACAAAAAGGAGAGAAGAATGCGTTTCTACATCCGCCGCATGGTCAAAACTCAGGCC TTCTACTGGACCGTGCTCAGTCTGGTAGCCCTCAACACGCTGTGGCTCGCCATTGTCCACTACAACCAGC

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Protein Sequence:

>RR204610 representing NM_012918
Red=Cloning site Green=Tags(s)

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TPCTPRPLVSYSPAPRRPAARRMAGPPAPPGGSPRGCRRAPRWPAHAPEGPRPRGADYTEPDSPREPPGG
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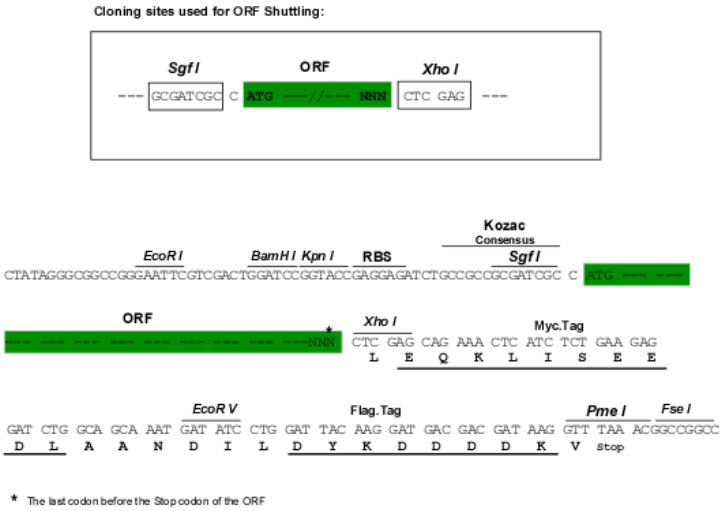
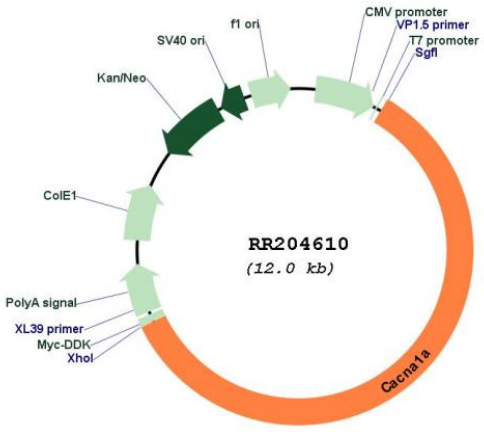
Restriction Sites: SgfI-XhoI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN:	NM_012918
ORF Size:	7104 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_012918.3, NP_037050.2
RefSeq Size:	8912 bp
RefSeq ORF:	7107 bp
Locus ID:	25398
UniProt ID:	P54282
Cytogenetics:	19q11
MW:	268 kDa
Gene Summary:	voltage-gated calcium channel that may be involved in secretion coupling in pancreatic beta cells [RGD, Feb 2006]