

Product datasheet for **MG212118**

Cacna1g (BC057399) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cacna1g (BC057399) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Cacna1g
Synonyms: a1G, [a]1G, alpha-1G, Cav3.1d
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG212118 representing BC057399
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGATGAGGAAGAGGATGGAGCGGGCGCCGAGGAGTCGGGACAGCCCCGGAGCTTCACGCAGCTCAACG
 ACCTGTCTGGGGCCGGGGCCGGCAGGGGCCGGGGTCGACGAAAAGGACCCGGGAGCGCGGACTCCGA
 GGCGGAGGGGCTGCCCTACCCGGCGCTGGCCCCGGTGGTTTTCTTCTACTTGAGCCAGGACAGCCGCCG
 CGGAGCTGGTGTCTCCGACGGTCTGTAACCCGTGGTTCGAGCGAGTCAGCATGTGTTATTCTCTCA
 ACTGTGTGACTCTGGGTATGTTCAAGCCGTGTGAGGACATTGCCTGTGACTCCCAACGCTGCCGGATCCT
 GCAGGCCTTCGACGACTTCATCTTTGCCTTCTTTGCTGTGAAAATGGTGGTGAAGATGGTCGCTTTGGGT
 ATCTTTGGGAAGAAATGTTACCTGGGAGACACTTGAACCCGGCTTGACTTTTTATCGTCATTGCTGGGA
 TGCTGGAGTACTCGCTGGACCTGCAGAATGTCAGCTTCTCCGAGTCAGGACAGTCCGTGTGCTGCGACC
 GCTCAGGGCCATTAACCGGGTGCCAGCATGCGCATTCTCGTCACATTACTGCTGGATACCTTGCCATG
 CTGGGCAATGCTCTGCTCTGTTTCTCGTCTTTTTCATCTTTGGCATCGTTGGTGTTCAGCTGTGGG
 CAGGGCTACTTCGAAACCGATGCTTCTCCCTGAGAATTCAGCCTCCCGCTGAGTGTGGACTTGGAGCC
 TTAACACAGACAGAGAATGAGGACGAGAGCCCCCTTCACTGCTCTCAGCCTCGGAGAACGGCATGCCA
 TCCTGCAGGAGCGTGCCACACTGCGCGGGGAAGGCGGTGGTGGTCCACCCTCGGTCTGGACTATGAGG
 CCTATAACAGTTCCAGCAATACCACCTGTGTCACTGGAACCAATACTATAACCACTGCTCTGCAGGCGA
 GCACAACCCCTTCAAAGGCGCCATCAACTTTGACAACATTGGCTATGCCTGGATCGCCATCTTCCAGGTC
 ATCACACTGGAGGGCTGGGTCGACATCATGTACTTTGTGATGGATGCTCATTCTTCTACAACCTCATCT
 ACTTCACTTCTCATCATCTTCTCTGAGACCAAGCAACGGGAGAGTCAGCTGATGCGGGAGCAGCGTGT
 ACGATTCTGTCCAATGCTAGCACCTGGCAAGCTTCTCTGAGCCAGGCAGCTGCTATGAGGAGCTTCTC
 AAGTACCTGGTGTACATCTCCGCAAAGCAGCCCCGAGGCTGGCCAGGTCTCTAGGGCTGTAGGCGTGC
 GGGCTGGGTTGCTCAGCAGCCAGTGGTCCGTGGTGGCAGGAGCCCCAGCCAGTGGCAGCTGCTCTCG
 TTCACACCGTCTGTCTGTCCACCACCTGGTCCACCACCATCACCACCACCATCACCCTACCACCTG



[View online >](#)

GGTAATGGGACGCTCAGAGTTCCCCGGGCCAGCCAGAGATCCAGGACAGGGATGCCAATGGGTCCCCT
 GGCTCATGCTGCCACCACCTCTACCCCACTCCCTCTGGGGCCCTCCGAGGGTGCAGGAGTGTACA
 CAGTTTACCATGCTGACTGCCACTTGGAGCCAGTCCGTTGCCAGGCGCCCCCTCCAGGTCCCATCG
 GAGGCATCTGGCAGGACTGTGGGTAGTGGGAAGGTATACCCCACTGTGCATACCAGCCCTCCACCAGAGA
 TGCTGAAGGATAAGGCACTAGTGGAGGTGGCCCCAGCCCTGGGCCCCCACCCTACCAGCTTCAACAT
 CCCACCTGGGCCCTTTCAGCTCCATGCACAAGCTCCTGGAGACACAGAGTACGGGAGCCTGCCATAGCTCC
 TGC AAAATCTCCAGCCCTTGTCCAAGGCAGACAGTGGAGCCTGTGGGCCGGACAGTTGCCCTACTGTG
 CCCGGACAGGAGCAGGGGAGCCAGAGTCCGCTGACCATGAAATGCCTGACTCAGACAGTGAGGCTGTGA
 TGAGTTACACAGGACGCTCAGCACAGGACCTCCGGGATCCCCACAGACGGCGACGGCCGAGCCTGGG
 CCAGATGCAGAGCCTAGTTCTGTGCTGGCCTTCTGGAGGCTGATCTGCGACACATTCCGGAAGATCGTAG
 ATAGCAAATACTTTGGCCGGGAATCATGATCGCTATCCTGGTCAATACCCTCAGCATGGGCATCGAGTA
 CCACGAGCAGCCGAGGAGCTCACCAACGCCCTGGAAATCAGCAACATCGTCTTACCAGCCTCTTCGCC
 TTGGAGATGCTGTAAGCTGCTCGTCTACGGTCCCTTCGGCTACATTAAGAATCCCTACAACATCTTTG
 ATGGCGTCATTGTGGTCATCAGCGTGTGGGAGATTGTGGGCCAGCAGGGAGGTGGCCTGTCGGTGTGCG
 GACCTTCCGCTGATGCGGGTGTGAAGCTAGTTCGCTTCTGCCGCACTGCAGCGGCAGCTCGTGGTG
 CTATGAAGACCATGGACAACGTGGCCACCTTCTGCATGTGCTCATGCTTTCATCTTTCATCTTACGCA
 TCCTGGGCATGCACCTTTTTGGTTGCAAGTTTCGCATCTGAACGGGATGGGGACACGTTGCCAGACGGAA
 GAATTTTGACTCCCTGCTCTGGGCCATTGTCACTGTCTTTCAGATTCTGACTCAGGAAGACTGGAATAAA
 GTCCTTTACAACGGCATGGCCTCCACGTCATCTTGGGCTGCTCTTACTTTCATCGCCCTCATGACTTTTG
 GCAACTACGTGCTCTTTAACCTGCTTGTGCCATTCTCGTGGAGGGTTCCAGGCAGAGGGAGATGCCAC
 CAAGTCTGAGTCAGAGCCTGATTTCTTTTCGCCAGTGTGGATGGTGATGGGGACAGGAAGAAGCGCTTG
 GCCCTGGTGGCCTTGGGAGAACACTCGAACTACGAAAGAGCCTTTTCCACCTCTCATCATCCACACAG
 CTGCTACACCGATGCTACTGCCAAGACTCCAGCACAGGTGTGGGGGAAGCACTGGGCTCGGCTCG
 CCGCACCAAGTAGCAGTGGGTCCGCTGAGCCTGGAACCTGCTCATGAGATGAAATCACCGCCAAGTGCC
 CGAAGCTCCCCGCACAGTCCCTGGAGCGCAGCAAGCAGCTGGACCAGCAGGCGCTCCAGCCGGAACAGCC
 TGGGCCGGCCCCCAGCCTGAAGCGTAGGAGCCCAAGCGGGGAGCGGAGGTCCCTGCTGTCTGGAGAGGG
 TCAGGAGAGCCAGGATGAGGAGGAGAGTTCAGAAGAGGACCGGGCCAGCCAGCAGGCAGTGATCATCGC
 CACAGGGGTTCTTGGAACGTGAGGCCAAGAGTTCCTTTGACCTGCCTGACACCCCTGCAGGTGCCGGGC
 TTCATCGAACAGCCAGCGGTCCGAGCTTCGCTCTGAACACCAAGACTGTAATGGCAAGTCGGCTTCAGG
 GCGTTTGGCCCGACCCCTGCGGGCTGATGACCCCCACTGGATGGGGATGATGGCGATGATGAGGGCAAC
 CTGAGCAAAGGGGAACGCTTACGAGCCTGGGTCCGAGCCCGCTCCCTGCCTGTTGCCGAGAGCGAGATT
 CCTGGTCTGCCTATATCTTCCCTCCCCAGTCAAGGTTTCGTCTCCTGTGTACCCGATCATCACCCACAA
 GATGTTTGACCATGTGGTCCCTCGTCATCATCTTCTCAACTGTATCACCATCGCTATGGAGCGCCCCAAA
 ATTGACCCCCACAGCGCTGAACGCATCTTCTGACCCCTCTCCAACATCATCTTACGGCAGTCTTCTCTGG
 CTGAAATGACAGTGAAGGTGGTGGCACTGGGCTGGTGTCTTGGGGAGCAGGCCTACCTGCGCAGCAGCTG
 GAACGTGCTGGACGGCTTGTGTTGCTCATCTCTGTGATCGACATCCTGGTGTCCATGGTCTCTGACAGC
 GGCACCAAGATTCTCGGCATGCTGAGGGTGTGCGGCTGCTGCGGACCCCTACGTCCACTCAGGGTCATCA
 GCCGGGCCAGGGGCTGAAGCTGGTGGTAGAGACTCTGATGTCATCCCTCAAACCCATTGGCAACATTGT
 GGTGATGCTGCTGCTTCTTTCATCATTTTTTGAATTTCTGGGGTGCAGCTCTTCAAAGGGGAAGTTCTTC
 GTGTGTCAGGGTGAGGACACCAGGAACATCACTAACAAAGTCCGACTGTGCTGAGGGCAGTTACCGGTGGG
 TCCGGCACAAGTACAACCTTGGAACCTGGGCCAGGCTCTGATGTCCCTGTTTGTGCTGGCCTCCAAGGA
 TGGCTGGGTTGACATCATGTATGATGGACTGGATGCTGTGGGAGTGGACCAGCAGCCATCATGAACCAC
 AACCTTGGATGCTGCTACTTTCATCTCCTTCTCCTCATCGTGGCCTTCTTCTGCTGAACATGTTTG
 TGGGCGTGGTGGTGGAGAACTTCCATAAGTGCAGGCAGCACCAGGAGGAGGAGGCGCGGCGGGGA
 GGAGAAGCGACTAAAGAGGCTGGAGAAAAGAGAAGGAATCTAATGTTGGACGATGTAATTGCTTCCGGC
 AGCTCAGCCAGCGCTGCGTCAGAAGCCAGTGC AAACCCCTACTACTCTGACTACTCGCGCTTCCGGCTCC
 TCGTCCACCACCTGTGTACCAGCCACTACCTGGACCTTTCATCACTGGTGTGATCGGGTGAATGTGGT
 CACGATGGCCATGGAACATTACCAGCAGCCCAGATCCTGGACGAGGCTCTGAAGATCTGCAACTACATC
 TTTACCGTCATCTTTGTCTTGGAGTCAGTATTC AAACCTTGTGGCCTTCCGGCTTCCGCCGGTCTTCCAGG
 ACAGGTGGAACAGCTGGACCTGGCTATTGTGCTTCTGTCCATCATGGGCATCACGCTGGAAGAGATTGA
 GGTCAATGCTTCACTGCCATCAACCCACCATCATCCGTATCATGAGGGTGTCCGCATTGCTCGAGTT
 CTGAAGCTGTTGAAGATGGCTGTGGCATGCGGGCACTGCTGGACACGGTGTGACAGGCCCTGCCCCAGG

TGGGGAACCTGGGACTTCTCTTCATGCTATTATTTTCATCTTTGCAGCTCTGGGCGTGGAGCTCTTTGG
AGACCTGGAGTGTGATGAGACACACCCTTGTGAGGGCTTGGGCCGGCATGCCACCTTTAGGAACTTTGGT
ATGGCCTTTCTGACCCTTCCGAGTCTCCACTGGTGACAACCTGGAATGGTATTATGAAGGACACCCTCC
GGGACTGTGACCAGGAGTCCACCTGCTACAACACCGTCACTCACCCATCTACTTCGTGTCTTCGTGCT
GACGGCCAGTTTGTGCTGGTCAACGTGGTCATAGCCGTGCTGATGAAGCACCTGGAAGAGAGCAACAAA
GAGGCCAAGGAGGAGGCGGAGTTGGAGGCGGAGCTGGAGCTAGAGATGAAGACACTCAGCCCCAGCCCC
ACTCCCCGCTGGGCAGCCCCCTTCTCTGGCCTGGGGTGAAGGTGTCAATAGCCCTGACAGCCCTAAGCC
TGGGGCTCCACACACCACGGCCACATTGGAGCAGCCTTTCAGGCTTCTCCCTTGAGCACCCACGATG
GTACCTCACACTGAGGAGGGCCAGTCCCCCTAGGACCAGACCTGCTGACTGTGAGGAAGTCTGGTGTCA
GCCGGACACACTCTGCCCCAATGACAGCTACATGTGCCGCAATGGGAGCACTGCCGAGAGATCCCTAGG
ACACAGGGGCTGGGGCTCCCCAAGCCAGTCAAGGCTCCATCTTGTCTGTTCACTCCCAACCAGCAGAC
ACCAGCTGCATCCTACAGCTTCCCAAAGATGCACACTATCTGCTCCAGCCTCATGGGGCTCCACCTGGG
GCGCCATCCCTAACTACCCACCTGGCCGCTCCCTCTGGCTCAGAGGCTCTCAGGGCCAGGCAGC
AATAAGGACTGACTCCCTGGACGTGCAGGGCTGGGTAGCCGGGAAGACCTGTTGTGAGAGGTGAGTGGG
CCCTCCTGCCCTCTGACCCGCTCCTCATCTTCTGGGGCGGGTCGAGCATCCAGGTGCAGCAGCGCTCCG
GCAGCCAGAGCAAAGTCTCCAAGCACATCCGCTGCCAGCCCTTGCCAGGCCTGGAACCCAGCTGGGC
CAAGGACCTCAAGAGACCAGAAGCAGCTTAGAGCTGGACACGGAGCTGAGCTGGATTTCAAGGAGACCTC
CTGCCAGCAGTCAAGGAAGAACCCCTGTCCCCACGGGACTTGAAAAATGCTACAGTGTAGAGGCCCAGA
GCTGCCGGCGCAGGCCTGGGTCTGGCTAGACGAACAGAGGAGACTCCATCGTGTGAGCTGCCTGGA
CAGCGGCTCCCAGCCCCGCTATGTCCAAGCCCTCAAGCCTCGGGGGCCAACCTTTGGGGGCCCTGGG
AGCCGGCCTAAGAAAAAAGTCAAGCCACCCAGTATCTCTATAGACCCCGGAGAGCCAGGGCCCTCGGC
CCCCATGCAGTCTGGCGTCTGCCTCAGGAGGAGGGCGCCGCCAGTACTCGAAGGATCCCTCGGCCTC
CAGCCCCCTTGACAGCACGGCTGCCTCACCTCCCCAAAGAAAGATGCGCTGAGTCTCTCTGGTTTGTCT
TCTGACCCAACAGACCTGGATCCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

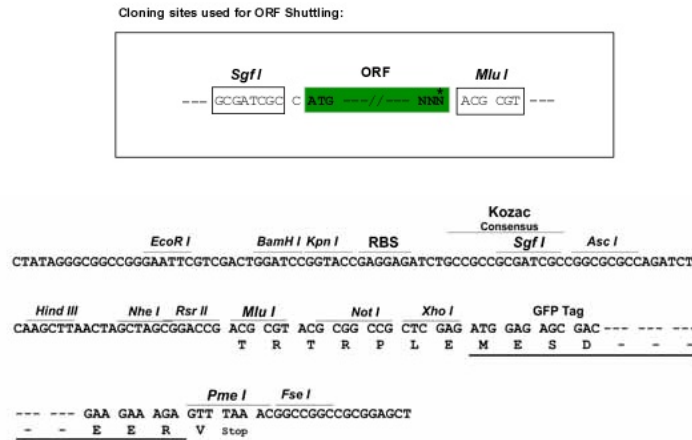
Protein Sequence: >MG212118 representing BC057399
 Red=Cloning site Green=Tags(s)

MDEEEDGAGAAESGQPRSFTQLNDLSGAGGRQGPSTGKDPGSADSEAEGLPYPALAPVVFYLSQDSRP
 RSWCLRTVCNPWFERSMLVILLNCVTLGMFRPCEDIACDSQRCRILQAFDDFIFAFFAVEMVVKMVALG
 IFGKKCYLGDTWNRLDFFIVIAAGMLEYSLDLQNVSFSAVRTVRVLRPLRAINRVPSMRILVTLTLLDTPM
 LGNVLLLCFFVFFIFGI VGVQLWAGLLRNRCFLPENFSLPLSVDLEPYQTENEDESPFICSPRENGMR
 SCRSVPTLRGEGGGPPCGLDYEA YNSSNTTCVNNWQYYTNC SAGEHNPFKGA INFDNIGYAWIAIFQV
 ITLEGWVDIMYFVMDAHSFYNF IYFILLIIFSETKQRESQLMREQRVRFLSNASTLASFSEPGSCYEELL
 KYLVYILRKAARRLAQVSRVAVGRAGLLSSPVVRRGQEPQPSGSCSRSHRRLSVHHLVHHHHHHHHHHYHL
 GNGTLRVPRASPEIQDRDANGSRWMLPPPSTPTPSGGPPRGAESVHSFYHADCHLEPVRCQAPPRSPS
 EASGRTVGSGKVYPTVHTSPPPEMLKDKALVEVAPSPGPPTLTSFNIPGPFSSMHKLETTQSTGACHSS
 CKISSPCSKADSGACGPDSCPYCARTGAGEPESADHEMPDSDSEAVVEFTQDAQHSDLRDPHRRRRPSLG
 PDAEPSSVLAFWRLICDTRFKIVDSKYFGRGIMIAILVNTLSMGIEYHEQPEELTNALEISNIVFTSLFA
 LEMLLKLLVYGPFGYIKNPYNI FDGVI VIVSWEIVGQQGGGLSVLRTFRLMRV LKLVRF PALQRQLVV
 LMKTMNDVATFCMLLMFLIFIFISILGMHLFGCKFASERDGTLPDRKNFDSLLWAI VTVFQILTQEDWNK
 VLYNGMASTSSWAALYFIALMTFGNYVLFNLLVAILVEGFQAEGDATKSESEPDFFSPSVDGDDGRKRL
 ALVALGEHSELRKSLPLLIHTAATPMSLPKSSSTGVGEALGSGSRRTSSSGSAEPGTAHHEMKSPPSA
 RSSPHSPWSAASSWTSRRSSRNLGRAPSLKRRSPSGERRSLLSGEGQESQDEEESSEEDRASPAGSDHR
 HRGSLEREAKSSFDLPDTLQVPLHRTASGRSSASEHQDCNGKSASGRLARTLRADDPPLDGDGDDDEGN
 LSKGERLRAWVRARLPACCRERDSWSAYIFPPQSRFRLCHR II THKMFHDHVVLIIFLNCITIAMERP
 IDPHSAERIFLTL SNYIFTAVFLAEMTVKVV ALGWC FGEQAYLRSSWNVLDGLLVLISVIDILVSMVSDS
 GTKILGMLRVLRLRLRTRL RVI SRAQGLKLVETLMSSLKPIGNIVVICAFFIIFGILGVQLFKGKFF
 VCQGEDTRNITNKSDCAEASYRWRHKYNFDNLGQALMSLFVLASKDGVVDIMYDGLDAVGVDQQPI MNH
 NPWMLLYFISFLLIVAFFVLNMFVGVVVENFHKCRQHQE EEEARRREEKRLKRLEKRRNMLDDV IASG
 SSASAASEAQCKPYYSYSRFRLLVHHLCTSHYLDL FITGVI GLNVVTMAMEHYQQQILDEALKICNYI
 FTVIFVLESVFKLVAFGFRFFQDRWNQLDLAIVLLSIMGITLEEIEVNASLPINPTIIRIMRVLR IARV
 LKLLKMAVGMRALLDTVMQALPQVGNLGLL FMLFFIFAALGVELFGDLECDETHPCEGLGRHATFRNFG
 MAFLTFRVSTGDNWNGIMKDTLRDCDQESTCYNTVISPIYFVSFVLT AQFVLVNVVIAVLMKHLEESNK
 EAKEEAELEAELEEMKTLSPQPHSPLGSPFLWPGVEGVNSPDSPKPGAPHTTAHIGAASSGF SLEHPTM
 VPHTTEGPVPLGPDLLTVRKSGVSRTHSLPNDSYMCNRGSTAERSLGHGWGLPKAQSGSILSVHSQPAD
 TSCILQLPKDAH YLLQPHGAPTWGAIPKLPPPGRSPLAQRP LRRQAAIRTDSDLVQGLGSREDLLSEVSG
 PSCPLTRSSSFWGGSSIQQQRSGS QSKVSKHIRLPAPCPGLEPSWAKDPQETR SLELDTELSWISGDL
 LPSSQEEPLSPRDLKKCYSVEAQSCRRRPGSWLDEQRRHSIAVSCLDSGSQPRLCPSPSSLGGQPLGGPG
 SRPKKLSPPSISIDPPESQGRPPCSPGVCLRRRAPASDSKDP SASSPLDSTAASPPKKDALSLSGLS
 SDPTDLDP

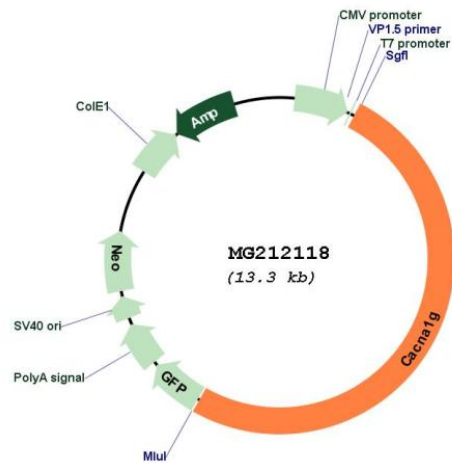
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: BC057399

ORF Size: 6746 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: [BC057399](#), [AAH57399](#)

RefSeq Size: 7527 bp

RefSeq ORF: 6746 bp

Locus ID: 12291

Cytogenetics: 11 D