

Product datasheet for **MG224537**

Srgap1 (NM_001081037) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Srgap1 (NM_001081037) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Srgap1
Synonyms:	4930572H05Rik; Arhgap13
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG224537 representing NM_001081037 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCACCCCGAGCAGATTCAAGAAGGACAAAGAGATCATAGCCGAGTATGAAAGTCAAGTCAAAGAAA
TCCGAGCCAGCTGGTAGAACACAAAAATGCCTGGAGCAGCAGACAGAGATGCGAGTTCAGCTGCTCCA
GGACCTACAAGATTTCTCCGAAAAAAGCCGAAATTGAGACGGAATATTCTCGAACCTGGAGAAGCTG
GCAGAAAGGTTTCATGGCCAAAACAAGAAGCACTAAGGACCATCAACAGTTCAGAAAGACCAAAACCTGT
TGCTCCAGTGAAGTGGTATTTGCTCCTGAACCAAGTGAGAAGAGAGAGCAAAGACCACGCCACTTT
GAGTGACATCTATCTGAACAATGTCATCATGCGGTTTCATGCAGATAAGCGAGGACTCCACCCGGATGTT
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TGATGAAAACCTACCACATGTACCACTCAGAGAGCATCAGTGCAGAGAGTAAGCTGAAAGAAGCCGAGAA
ACAAGAGGAGAAGCAGATTGGGAGGTCCGGCGACCCAGTCTCCACATTAGGCTGGAAGAGAGGCATCAG
AGGCGGAGCTCTGTGAAGAAAATGAAAAAATGAAGGAAAAGAGACAAGCAAAATATTGAGAAAATAGC
TGAAATCGATCAAAGCCCGCAACGAGTATCTCCTAACACTGAAGCAACCAACGCCTCCGTGTTCAAGTA
TTACATCCATGATCTTTAGACTTAATAGACTGCTGTGATCTCGGCTACCATGCAAGTCTGAACAGAGCC
CTCAGAACGTACCTCTCGGCGGAGTACAACCTTGAAACCTCCAGACACGAAGGCTTAGACATCATTGAAA
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CCCCCAATGAAATTCGAGTTTCAGTCTCACATGGGTGATGAGGTGTGTGAGGTGAGGTCAGGTCAGCGCCAGCAGCCC
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AGGAGGTCAAGAAAACGACAGAAGCCACCTCCAGACGATCCAAGATATGGTCACCATTGAGGACTATGA
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AGGAAGTCCAGGCCCGCTCCCAGTATAATGCTAAGTTGTTAATGGGGATTTGGAGACATTCGTC AAGG
 ACTCAGGCCAGGTTATCCCTCTCATTGTGGAAAGCTGCATCCGATTCAATCTCTATGGCCTTCAGCA
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 CACCAGCTCCTCCAGCGAGACAATGAGTACTTTCAAGCCTATGGTGGCGCCCGGATGGGCTCCAGCTG
 AAGCCCCAGCCCTTAGGCCAAAGCCTGCTGTTCTTCAAAAACAACCCCTACGATGGGACCTGCCGCAC
 CTTCCCAGGGTCCACAGACAAGTCTTGCACGATG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG224537 representing NM_001081037

Red=Cloning site Green=Tags(s)

MSTPSRFKDKKEIIAEYESQVKEIRAQLVEQQKCLEQQTEMRVQLQLDLQDFFRKKAIEIETYSRNLEKL
 AERFMAKTRSTKDHQQFKKQDQNLSPVNCWYLLLNQVRRESKDHATLSDIYLNIVIMRFMQISEDSTRMF
 KKSKEIAFQLHEDLMKVLNELYVMKTYHMYHSEISAESKLEAEKQEEKQIGRSGDPVFHIRLEERHQ
 RRSSVKKIEKMKEKRQAKYSENKLSIKARNEYLLTLEATNASVFKYYIHDLSDLIDCCDLGYHASLNRA
 LRTYLSAEYNLETSRHEGLDIIENAVDNLEPRSDKQRFMEMYPAAFPPMKFEFQSHMGDEVQVSAQQP
 VQAEMLRNQQLQSRLATLKIESEEVKTTTEATLQTIQDMVTIEDYDVSECFQHSRSTESVKSTVSETYL
 SKPSIAKRRANQQETEQFYFMKLREFLEGSNLITKLQAKHDLLQRTLGEHRAEYMTTRPPNVPPKQKH
 RKSRPRSQYNAKLFNGDLETFVKDSGVIPLIVESCIRFINLYGLQHGGIFRVSGSQVEVNDIKNSFERG
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 MRYLFAFLNHL SQYSDENMMDPYNLAICFGPTLMPVPEIQDQVSCQAHVNEIVKTIIEHETIFPDAKEL
 DGPVYEKCMAGGDYCDSPYSEHGTL EEVDQDAGTEPHTSEDECEPIEAIKFDYVGRSARELSFKKGASL
 LLYHRASEDWWEGRHNGIDGLVPHQYIVVQDMDDTFSDTL SQKADSEASSGPVTEDKSSSKDMNSPTDRH
 SDSYLARQKRGEPPPPGRRPGRTSDGHCPLHPPHALSNSIDLGSPNLASHPRGLLQNRGLNNDSPERR
 RRPGHGSLTNI SRHDSLKIDSPPIRRSTSSGQYTFGNHDKPLDPETIAQDIEETMNTALNELRELERQS
 TVKHAPDVVLDLTLEQVKNSTPATSTESLSPLHNVALRGSEPIRRRSTSSSETMSTFKPMVAPRMGVQL
 KPPALRPKPAVLPKTNPTMGAAPSQGPTDKSCTM

TRTRPLE – GFP Tag – V

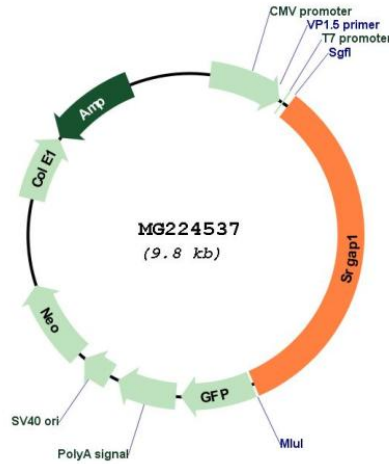
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001081037

ORF Size: 3255 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:	<ol style="list-style-type: none">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:	<u>NM_001081037.2, NP_001074506.1</u>
RefSeq Size:	3414 bp
RefSeq ORF:	3258 bp
Locus ID:	117600
Cytogenetics:	10 D2
Gene Summary:	GTPase-activating protein for RhoA and Cdc42 small GTPases. Together with CDC42 seems to be involved in the pathway mediating the repulsive signaling of Robo and Slit proteins in neuronal migration. SLIT2, probably through interaction with ROBO1, increases the interaction of SRGAP1 with ROBO1 and inactivates CDC42 (By similarity).[UniProtKB/Swiss-Prot Function]