

Product datasheet for **MG217088**

Srgap2 (NM_001081011) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Srgap2 (NM_001081011) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Srgap2
Synonyms:	9930124L22Rik; AI448945; FBP2; Fnbp2; srGAP3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG217088 representing NM_001081011 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCC**CGATCGCC**

ATGACGCTCCAGCCAAATTCAAAAAGGATAAGGAGATCATCGCAGAGTACGATACTCAGGTCAAAGAGATTAGGGCTCAGCTCACAGAGCAGATGAAATGCCTAGATCAGCAATGTGAGCTCCGGTGCAGCTGTTGCAAGCTGCAGGACTTCTCCGCAAGAAGGCTGAGATTGAAATGGACTACTCTCGAAACCTGGAGAAGCTAGCCGAGCGCTTTCTAGCCAAGACACGAAGCACCAAGACCAGCAATTTAAGAAGGACCAGAATGTTCTTTCTCCAGTCAACTGCTGGAACCTCCTCTTAAACCAAGTGAAGCGGGAGAGCAGGGATCATACCACCCTGAGTGACATCTACCTGAATAATATAATTCTCGATTGTTCAAGTCAGCGAGGACTCAGGAAGACTCTTTAAAGAGTAAAGAAGTTGGCCAGCAACTCCAAGATGATTTGATGAAAAGTCCCTGAACGAGCTTTACTCGGTCAAGAAGACATATCACATGTACAATGCCGACAGCATCAGTGCTCAGAGCAAAGTGAAGGAAGCAGAGAAACAAGAAGAGAAGCAAATTGGCAATCAGTAAAGCAAGAGGACCGGCAGACCCCTCGCTCCCCTGACTCCACAGCCAATGTCCGATTGAGGAGAAGCATGTCCGGAGGAGCTCAGTGAAGAAGATTGAGAAGATGAAGGAGAAGCGACAAGCCAAGTACACAGAAAATAAGCTGAAGGCCATTAAGCCCGAATGAGTATTTATTGGCTTTGGAGGCAACCAATGCATCTGTCTCAAGTACTATATCCATGACCTGTCTGATATTATTGATCAATGTTGTGACCTAGGCTACCATGCTAGCTGAACCGGGCTCTACGCATTTTCTATCTGCTGAATTAATCTGGAACAGTCAAAAACATGAAGGTCTGGATGCTATTGAAAAATGCAGTAGAAAACCTAGATGCCACCAGTGACAAGCACGGCTCATGGAGATGTACAACAATGTTTTTGGCCCCCTATGAAATTTGAATTCAGCCCCACATGGGAGATATGGCCTCTCAACTCTGTGCCAGCAGCCTGTCCAGAGTGAAGTGGTGCAGAGATGCCAACAGCTGCAGTCTCGTTATCCACTTTGAAGATTGAGAATGAAGAGGTGAAAAAGACAATGGAGGCCACCCTGCAGACATTCAAGACATTGTGACTGTTGAGGATTTTGTATCTGACTGCTCCAGTATAGCAATTCATGGAGTCTGTCAAATCAACTGTCTCTGAAACATTCATGAGCAAGCCCAGCATTGCTAAGAGGAGAGCGAACCAGCAAGAGACGGAACAGTTTTATTTACGAAAATGAAGGAGTACTTGGAGGTAGGAACCTCATCACTAAGCTACAAGCCAAGCATGACCTCTGCAGAAAACCTGGGAGAAAGTCAGCGGACAGACTGTAGTCTTGCCAGG



[View online »](#)

CGAAGCTCAACTGTGAGGAAACAGGATTCCAGCCAAGCAATTCCTCTGGTGGTAGAAAGCTGCATCCGGT
 TTATTAGCAGACATGGCCTACAACATGAGGGAATTTCCGGGTTTCTGGATCACAAAGTAGAAGTGAACGA
 CATAAAAAACGCCTTTGAGAGAGGAGAGGATCCCTGGCTGGGGACCAGAATGACCATGACATGGACTCT
 ATAGCTGGTGTCTCAAGCTTTACTTCCGGGGCCTGGAACACCCGCTCTTCCCTAAAGACATCTCCATG
 ACTTGATTGCCTGTGTACAATGGACAACCTGCAAGAGAGAGCTGTGCATATCCGGAAAGTCTTCTGGT
 CCTGCCAAGCCCACTGTGATTATCATGAGATATCTCTTTGCCTTCTCAATCACTTATCACAGTTCAGT
 GAAGAGAACATGATGGACCCCTACAACCTTGCCATCTGCTTCGGGCCCTCACTGATGTGAGTGGCAGAGG
 GCCACGACCAGGTGTCTGTCAAGCCCAGTGAATGAGCTGATCAAAACCATCATCAACATGAGAA
 CATTTTCCCAAACCCAGGGAGCTGGAGGGTCCCCTCTACAGCAGAGGAGGAAGCATGGAGGATTACTGT
 GACAGCACTCATGGAGAGACTACCTCTGCTGAAGACTCCACCCAGGACGTTACAGCGGAGACCACACAA
 GCGATGATGAATGTGAGCCCATAGAAGCCATTGCCAAGTTTACTACGTAGGCCGGACAGCCCGAGAAGT
 GTCTTTCAAGAAGGGAGCATCCCTGCTGCTCTACCAGCGAGCTTCTGATGACTGGTGGGAGGGCCGGCAC
 AACGGTATAGATGGACTCATCCCCATCAGTACATCGTAGTCCAAGACACCGAGGACGGTGTCTGGAGA
 GGTCCAGCCCAAGTCTGAGATTGAGGTATGTCTGAGCCACCTGAAGAAAAGGTGACAGCCAGAACGGG
 GGCCAGCTGTCCCAGTGGGGTCTGTAGCTGATATTTATCTTCAAACATCAACAAGCAAAGGAAGCGT
 CAGAATCTGGGAGCATCAGAAAAGCATTTCCGGAGTACAGCCATGGGCTGGGCAGTTCTCTGACTGACT
 CCTCTCCCTGGGGTGGGGGCTAGCTGCCGTCCATCCTCCCAGCCCATCATGAGCCAGAATCTCCCAA
 GGAAGGGCCAGATAAGTGTTCATCAGCGGCCATGGCAGCCTCAACTCTATCAGCCGCCACTCATCTTG
 AAGAACCAGGATGGACAGTCCACAGATCCGGAAGACCGCTACGGCAGGAAGGTCAAAAAGTTTCAATAACC
 ATCGGCCCATGGACCCTGAAGTCAATGCACAGGATTTGAAGCAACAATGAAGTCTGCCCTGAATGAGCT
 TCAAGAGCTAGAGCGGCAGAGCAGTGTCTAAGCACACACCTGATGTGGTCTGGACACCTTGAACCACTC
 AAGACCTCCCCGGTGGTAGCCCCACATCTGAGCCCTCCAGCCCTCTGCACACCCAGCTCCTCAAGGACC
 CTGAGCCTGCCTCCAGCGCAGCGTAGTACTGCTGGGACATTGCCTGCGCCTTCCGGCCTTCCGGCCTT
 TGTCGAAGATGGCTGCTCCAGTCAAACCCAGCCACACGCCCCAAGCCAAGTGTCTTCCCAAAAACAAAC
 GCCACTAGCCCTGGTGTCAATTCATCTGCTTCCACAGGCCACTGACAAGTCTTGTACTGTC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG217088 representing NM_001081011
 Red=Cloning site Green=Tags(s)

MTSPAKFKKDKKEIIAEYDTQVKEIRAQLTEQMKCLDQQCELRVQLQLDQDFRKKAEIEMDYSRNLEK
 AERFLAKTRSTKDQQFKKQNVLSVNCWNLNLLNQVKRESRDHTLSDIYLNIIIPRFVQVSEDSGRLFK
 KSKEVGGQLQDDLMKVLNELYSVMKTYHMYNADSI SAQSKLKEAEKQEEKQIGKSVKQEDRQTPRSPDST
 ANVRIEEKHVRSSVKKIEKMKEKRQAKYENKLAIKARNEYLLALEATNASVFKYYIHDLSIDIQCC
 DLGYHASLNRALRTFLSAELNLEQSKHEGLDAIENAVENLDATSDKQRLMEMYNNVFCPPMKFEFQPHMG
 DMASQLCAQQPVQSELVQRCQQLQSRLSTLKIENEEVKTMEATLQTIQDIIVTVEDFDVSDCFQYSNSME
 SVKSTVSETFMSPSIAKRRANQETEYFQYFTKMKYLEGRNLIITKLQAKHDLLQKTLGESQRTDCSLAR
 RSSTVRKQDSSQAIPLVVEESCIRFISRHLQHEGIFRVSGSQVEVNDIKNAFERGEDPLAGDQNDHMDMS
 IAGVLKLYFRGLEHPLFPKIDIFHDLIACVTMDNLQERAVHIRKVVLLVLPKPTLIIMRYLFAFLNHLSSQFS
 EENMMDPYNLAICFGPSLMSVPEGHQVSCQAHVNELIKTIIIQHENIFPNPRELEGPIYSRGGSMEDYC
 DSTHGETTSAEDSTQDVTAEHHTSDDECEPIEAIKFDYVGRARELSFKKASLQLYQRASDDWWEGRH
 NGIDGLIPHQYIIVVQDTEGDVVERSSPKSEIEVMSEPPEEKVTARTGASCPGGHVADIYLANINKQRKR
 PESGSIRKAFRSDSHGLGSSLTDSSSLGVGASCRPSSQPIMSQNLPEKGPDKCSISGHGSLNSISRHSSL
 KNRMDSPQIRKTATAGRSKSFNNHRPMDPEVIAQDIEATMNSALNELQELERQSSAKHTPDVVLDTLEPL
 KTSPPVAPTSEPSPLHTQLLKDPEPAFQRSASTAGDIACAFRPVKSVMKMAAPVKPPATRPKPTVFPKTN
 ATSPGVNSSASPAQATDKSCTV

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_001081011

ORF Size: 3213 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_001081011.2](#), [NP_001074480.2](#)

RefSeq Size: 8040 bp

RefSeq ORF: 3216 bp

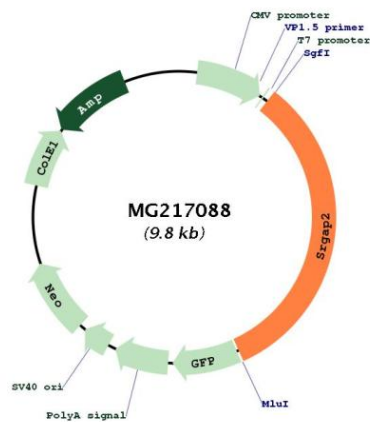
Locus ID: 14270

UniProt ID: [Q91Z67](#)

Cytogenetics: 1 E4

Gene Summary: RAC1 GTPase activating protein (GAP) that binds and deforms membranes, and regulates actin dynamics to regulate cell migration and differentiation. Plays an important role in different aspects of neuronal morphogenesis and migration mainly during development of the cerebral cortex. This includes the biogenesis of neurites, where it is required for both axons and dendrites outgrowth, and the maturation of the dendritic spines. Also stimulates the branching of the leading process and negatively regulates neuron radial migration in the cerebral cortex. May play a role for cognition, learning and memory. In non-neuronal cells, it may also play a role in cell migration by regulating the formation of lamellipodia and filopodia.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG217088