

## Product datasheet for MR217088

### Srgap2 (NM\_001081011) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Srgap2 (NM\_001081011) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Srgap2  
**Synonyms:** 9930124L22Rik; AI448945; FBP2; Fnbp2; srGAP3  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR217088 representing NM\_001081011  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGGATCGCC

ATGACGTCTCCAGCCAAATTCAAAAAGGATAAGGAGATCATCGCAGAGTACGATACTCAGGTCAAAGAGA  
 TTAGGGCTCAGCTCACAGAGCAGATGAAATGCCTAGATCAGCAATGTGAGCTCCGGTGCAGCTGTTGCA  
 GGACCTGCAGGACTTCTCCGCAAGAAGGCTGAGATTGAAATGGACTACTCTCGAAACCTGGAGAAGCTA  
 GCCGAGCGCTTTCTAGCCAAGACACGAAGCACCAAGACCAGCAATTTAAGAAGGACCAGAATGTTCTTT  
 CTCGAGTCAACTGCTGGAACCTCCTCTTAAACCAAGTGAAGCGGGAGAGCAGGGATCATACCACCCTGAG  
 TGACATCTACCTGAATAATATAATTCTCGATTTGTTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGT  
 AAGAGTAAAGAAGTTGGCCAGCAACTCCAAGATGATTTGATGAAAGTCTGAACGAGCTTTACTCGGTCA  
 TGAAGACATATCACATGTACAATGCCGACAGCATCAGTGTCTCAGAGCAAACCTGAAGGAAGCAGAGAAACA  
 AGAAGAGAAGCAAATGGCAATCAGTAAAGCAAGAGGACCGGCAGACCCCTCGCTCCCCTGACTCCACA  
 GCCAATGTCCGCATTGAGGAGAAGCATGTCCGGAGGAGCTCAGTGAAGAAGATTGAGAAGATGAAGGAGA  
 AGCGACAAGCCAAGTACACAGAAAATAAGCTGAAGGCCATTAAAGCCCGAATGAGTATTTATTGGCTTT  
 GGAGGCAACCAATGCATCTGTCTTCAAGTACTATATCCATGACCTGTCTGATATTATTGATCAATGTTGT  
 GACCTAGGCTACCATGCTAGCTGAACCGGGCTCTACGCACTTTTCTATCTGCTGAATTAATTAATGGAAC  
 AGTCAAAAACATGAAGGTCTGGATGCTATTGAAAAATGCAGTAGAAAACCTAGATGCCACCAGTGACAAGCA  
 ACGGCTCATGGAGATGTACAACAATGTTTTTGGCCCCCTATGAAATTTGAATTCAGCCCCACATGGGA  
 GATATGGCCTCTCAACTCTGTGCCAGCAGCCTGTCCAGAGTGAAGTGGTGCAGAGATGCCAACAGCTGC  
 AGTCTCGTTATCCACTTTGAAGATTGAGAATGAAGAGGTGAAAAAGACAATGGAGGCCACCCTGCAGAC  
 CATTCAAGACATTGTGACTGTTGAGATTTTGTATCTGACTGCTCCAGTATAGCAATTCATGGAG  
 TCTGTCAAATCAACTGTCTCTGAAACATTCATGAGCAAGCCAGCATTGCTAAGAGGAGAGCGAACCAGC  
 AAGAGACGGAACAGTTTTATTTACGAAAATGAAGGAGTACTTGGAGGTAGGAACCTCATCACAAGCT  
 ACAAGCCAAGCATGACCTCTGCAGAAAACCTGGGAGAAAGTCAAGCGGACAGACTGTAGTCTTGCCAGG



[View online »](#)

CGAAGCTCAACTGTGAGGAAACAGGATTCCAGCCAAGCAATTCCTCTGGTGGTAGAAAGCTGCATCCGGT  
 TTATTAGCAGACATGGCCTACAACATGAGGGAATTTCCGGGTTTCTGGATCACAAAGTAGAAGTGAACGA  
 CATAAAAAACGCCTTTGAGAGAGGAGAGGATCCCTGGCTGGGGACCAGAATGACCATGACATGGACTCT  
 ATAGCTGGTGTCTCAAGCTTTACTTCCGGGGCCTGGAACACCCGCTCTTCCCTAAAGACATCTCCATG  
 ACTTGATTGCCTGTGTACAATGGACAACCTGCAAGAGAGAGCTGTGCATATCCGGAAAGTCTTCTGGT  
 CCTGCCAAGCCCACTGATTATCATGAGATATCTCTTTCCTTCCCTCAATCACTTATCACAGTTCAGT  
 GAAGAGAACATGATGGACCCCTACAACCTTGCCATCTGCTTCGGGCCCTCACTGATGTGAGTCCAGAGG  
 GCCACGACCAGGTGCTGTCAAGCCCACGTGAATGAGCTGATCAAAACCATCATCAACATGAGAA  
 CATTTTCCCAAACCCAGGGAGCTGGAGGGTCCCCTACAGCAGAGGAGGAAGCATGGAGGATTACTGT  
 GACAGCACTCATGGAGAGACTACCTCTGCTGAAGACTCCACCCAGGACGTTACAGCGGAGACCACACAA  
 GCGATGATGAATGTGAGCCCATAGAAGCCATTGCCAAGTTTACTACGTAGGCCGAGACGCCGAGAAGT  
 GTCTTTCAAGAAGGGAGCATCCCTGCTGCTTACCAGCGAGCTTCTGATGACTGGTGGGAGGGCCGGCAC  
 AACGGTATAGATGGACTCATCCCCATCAGTACATCGTAGTCCAAGACACCGAGGACGGTGTCTGGAGA  
 GGTCCAGCCCCAAGTCTGAGATTGAGGTATGTCTGAGCCACCTGAAGAAAAGGTGACAGCCAGAACGGG  
 GGCCAGCTGTCCCAGTGGGGTCTGTAGCTGATATTTATCTTCAAACATCAACAAGCAAAGGAAGCGT  
 CAGAATCTGGGAGCATCAGAAAAGCATTTCCGGAGTGACAGCCATGGGCTGGGCAGTTCTCTGACTGACT  
 CCTCTCCCTGGGGTGGGGGCTAGCTGCCGTCCATCCTCCCAGCCCATCATGAGCCAGAATCTCCCAA  
 GGAAGGGCCAGATAAGTGTTCATCAGCGGCCATGGCAGCCTCAACTCTATCAGCCGCCACTCATCTTG  
 AAGAACCAGGATGGACAGTCCGCAGATCCGGAAGACCGCTACGGCAGGAAGGTCAAAAAGTTTCAATAAC  
 ATCGGCCCATGGACCCTGAAGTCAATGCACAGGATTTGAAGCAACAATGAAGTCTGCCCTGAATGAGCT  
 TCAAGAGCTAGAGCGGCAGAGCAGTGTCTAAGCACACACCTGATGTGGTCTGGACACCTTGAACCACTC  
 AAGACCTCCCCGGTGGTAGCCCCACATCTGAGCCCTCCAGCCCTCTGCACACCCAGCTCCTCAAGGACC  
 CTGAGCCTGCCTCCAGCGCAGCGTAGTACTGCTGGGACATTGCCTGCGCCTCCGGCCTTCCGGCCTGAAAGT  
 TGTCGAAGATGGCTGCTCCAGTCAAACACCAGCCACAGGCCCAAGCCAACTGTCTTCCCAAACAAAC  
 GCCACTAGCCCTGGTGTCAATTCATCTGCTTCCCACAGGCCACTGACAAGTCTTGTACTGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR217088 representing NM\_001081011  
 Red=Cloning site Green=Tags(s)

MTSPAKFKKDKKEIIAEYDTQVKEIRAQLTEQMKCLDQQCELRVQLQLDQDFFRKKAIEIMDYSRNLEKL  
 AERFLAKTRSTKQFQFKKQNVLSPVNCWNLNQNQVRESRDHTLSDIYLNIIIPRFVQVSEDSGRLFK  
 KSKEVGGQLQDDLMKVLNELYVMKTYHMYNADSI SAQSKLKEAEKQEEKQIGKSVKQEDRQTPRSPDST  
 ANVRIEEKHVRSSVKKIEKMKEKQAKYENKKAIKARNEYLLALEATNASVFKYYIIDLSDIIDQCC  
 DLGYHASLNRALRTFLSAELNLEQSKHEGLDAIENAVENLDATSDKQRLMEMYNNVFCPPMKFEFQPHMG  
 DMASQLCAQQPVQSELVQRCQQLQSRLSTLKIENEEVKKTMEATLQTIQDQIVTVDFDVSDFQYSNSME  
 SVKSTVSETFMSKPSIAKRRANQETEYFQYTKMKEYLEGRNLITKLQAKHDLLQKTLGESQRTDCSLAR  
 RSSTVRKQDSSQAIPLVVESCIRFISRHGLQHEGIFRVSGSQVEVNDIKNAFERGEDPLAGDQNDHMDMS  
 IAGVLKLYFRGLEHPLFPKDIHFHDLIACVTMDNLQERAVHIRKVLVLPKPTLIIMRYLFAFLNHLNQFS  
 EENMMDPYNLAICFGPSLMSVPEGHQVSCQAHVNELIKTIIHQHENIFPNPRELEGPIYSRGGSMEDYC  
 DSTHGETTSAEDSTQDVTAEHHTSDDECEPIEAIKAFDYVGRARELSFKKASLQLYQRASDDWWEGRH  
 NGIDGLIPHQYIVVQDTEGTVVERSSPKSEIEVMSEPEEKVTARTGASCPSSGGHVADIYLANINKQRKR  
 PESGSIKRAFSDSHLGSSTDSSSLGVGASCRPSSQPIMSQNLPEKGPDKCSISGHGSLNSISRHSSL  
 KNRMDSPQIRKTATAGRSKSFNNHRPMDPEVIAQDIEATMNSALNELQELERQSSAKHTPDVVLDTLEPL  
 KTSPPVAPTSEPSSPLHTQLLKDPEPAFQRSASTAGDIACA FRPVKSVKMAAPVKPPATRPKPTVFPKTN  
 ATSPGVNSSASPQATDKSCTV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9094\\_d10.zip](https://cdn.origene.com/chromatograms/mm9094_d10.zip)

**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

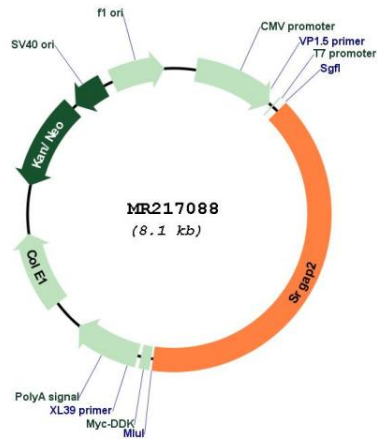
**Locus ID:** 14270

**UniProt ID:** [Q91Z67](#)

**Cytogenetics:** 1 E4  
**MW:** 120.8 kDa

**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 MR217088