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Product datasheet for RR207887

Srgap2 (NM_001134958) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Srgap2 (NM_001134958) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Srgap2
Synonyms:	RGD1566016
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RR207887 representing NM_001134958
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACGTCTCCAGCCAAATTCAAAAAGGATAAGGAGATCATCGCAGAGTATGATACTCAGGTCAAAGAGA
TCCGGGCTCAGCTCACAGAGCAGATGAAATGCCTAGATCAGCAGTGCGAGCTCCGGGTGCAGCTGTTGCA
AGACCTGCAGGACTTCTTCCGCAAGAAGGCTGAGATTGAGATGGACTACTCTCGCAACCTGGAGAAGCTA
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TGACATCTACCTGAATAATATAATTCCTCGATTTGTTCAAGTCAGCGAGGACTCAGGAAGACTCTTTAAA
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TCGCCCGCCCATGAGCTGCCGCCTCCCCAAGAGGCACTCAGGCTATTGGAGAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

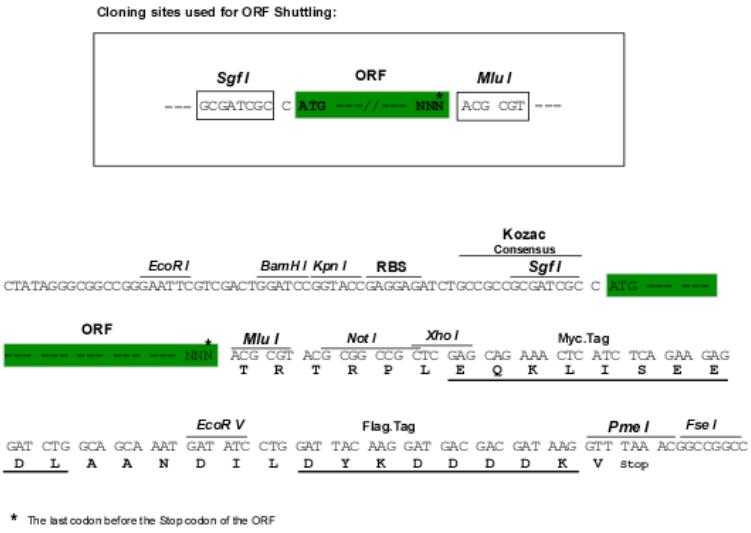
>RR207887 representing NM_001134958
Red=Cloning site Green=Tags(s)

MTSPAKFKKDKEIIAEYDTQVKEIRAQLTEQMKCLDQQCELRVQLLQDLQDFFRKKAEIEMDYSRNLEKL
AERFLAKTRSTKDQQFKKDQNVLSPVNCWNLLLNQVKRESRDHTTLSDIYLNNIIPRFVQVSEDSGRLFK
KSKEVGQQLQDDLMKVLNELYSVMKTYHMYNADSISAQSKLKEAEKQEEKQIGKSVKQEDRQTPRSPDST
ANVRIEEKHVRRSSVKKIEKMKEKRQAKYTENKLKAIKARNEYLLALEATNASVFKYYIHDLSDIIDQCC
DLGYHASLNRALRTFLSAELNLEQSKHEGLDAIENAVENLDATSDKQRLMEMYNNVFCPPMKFEFQPHMG
DMASQLCAQQPVQSELVQRRQQLQSRLSTLKIENEEVKKTMEATLQTIQDIVTVEDFDVSDCFQYSNSME
SVKSTVSETFMSKPSIAKRRANQQETEQFYFTKMKEYLEGRNLITKLQAKHDLLQKTLGESQRTDCSLAR
RSSTVRKQDSSQAIPLVVESCIRFISRHGLRHEGVFRVSGSQVEVNDIKNAFERGEDPLAGDQNDHDMDS
IAGVLKLYFRGLEHPLFPKDIFHDLIACVTMDNLQERAVHIRKVLLVLPKPTLIIMRYLFAFLNHLSQFS
EENMMDPYNLAICFGPSLMSVPEGHDQVSCQAHVNELIKTIIIQHENIFPNPRELEGPIYSRGGSMEDYC
DSTHGETISAEDSTQDVTAEHHTSDDECEPIEAIAKFDYVGRTARELSFKKGASLLLYQRASDDWWEGRH
NGIDGLIPHQYIVVQDTEDGVVERSSPKSEIEVMSEPPEEKVTARTGASCPSGGHVADIYLANINKGIPR
SPAHELPPPQEALRLLEN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

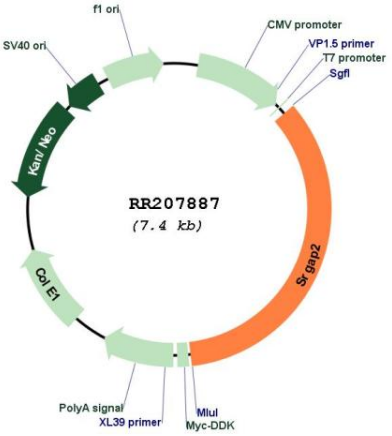
Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN:	NM_001134958
ORF Size:	2574 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_001134958.1, NP_001128430.1
RefSeq Size:	3559 bp
RefSeq ORF:	2577 bp
Locus ID:	360840
Cytogenetics:	13q13
MW:	98.4 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 (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RR207887