

Product datasheet for **RG230641**

SRGAP2 (NM_001170637) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SRGAP2 (NM_001170637) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SRGAP2
Synonyms:	ARHGAP34; FNBP2; SRGAP2A; SRGAP3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG230641 representing NM_001170637 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACGCTCCAGCCAAATTCAAAAAGGATAAGGAGATCATAGCAGAGTACGATACTCAGGTCAAAGAGA
TCCGTGCTCAGCTCACAGAGCAGATGAAATGCCTGGACCAGCAGTGTGAGCTTCGGGTGCAACTGTTGCA
GGACCTCCAGGACTTCTCCGAAAGAAGGCAGAGATTGAGATGGACTACTCCCGAACCTGGAGAAGCTG
GCAGAACGCTTCTGGCCAAGACACGCAGCACCAAGACCAGCAATTCAAGAAGGATCAGAATGTTCTCT
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TGACATCTACCTGAATAATATCATTCTCGATTTGTACAAGTCAGCGAGGACTCAGGAAGACTCTTTAAA
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GCCAACGTTTCGATTGAGGAGAAACATGTCCGGAGGAGCTCAGTGAAGAAGATTGAGAAGATGAAGGAGA
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AGCTCAACTGTGAGGAAACAGGACTCCAGCCAGGCAATTCCTCTGGTGGTGGAAAGCTGTATCCGGTTTA
TCAGCAGACACGGACTACAGCATGAAGGAATTTCCGGGTGTCAGGATCCCAGGTGGAAGTGAATGACAT
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CAAGATGGCTGCCCGGTCAAACCACGACACGCGCCCAAGCCCACTGTCTTCCCAAAACAAATGCC
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG230641 representing NM_001170637

Red=Cloning site Green=Tags(s)

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MTSPAKFKKDKKEIIAEYDTQVKEIRAQLTEQMKCLDQQCELRVQLQLDQDFRKKAEIEMDYSRNLEK
AERFLAKTRSTKDQQFKKQNVLSVNCWNLNLLNQVKRESRDHTLSDIYLNIIIPRFVQVSEDSGRLFK
KSKEVGGQLQDDLMKVLNELYVMKTYHMYNADSI SAQSKLKEAEKQEEKQIGKSVKQEDRQTPRSPDST
ANVRIEEKHVRSSVKKIEKMKEKRQAKYENKLAIKARNEYLLALEATNASVFKYYIHDLSLIDCCD
LGYHASLNRALRTFLSAELNLEQSKHEGLDAIENAVENLDATSDKQRLMEMYNNVFCPPMKFEFQPHMGD
MASQLCAQPQVQSELVQRCQQLQSRLSTLKIENEEVKKTMEATLQTIQDIVTVEFDVSDCFQYSNSMES
VKSTVSETFMSKPSIAKRRANQQETE QFYFTKMKYLEGRNLITKLQAKHDLLQKTLGESQRTDCSLARR
SSTVRKQDSSQAIPLVVEESCIRFISRHLQHEGIFRVSGSQVEVNDIKNAFERGEDPLAGDQNDHMDSI
AGVLKLYFRGLEHPLFPKDI FHDLMACVTMDNLQERALHIRKVLVLPKTTLIMRYLFAFLNHL SQFSE
ENMMDPYNLAICFGPSLMSVPEGHQVSCQAHVNELIKTII IQHENIFPSPRELEGPVYSRGGSMEDYCD
SPHGETTSVEDSTQDVTAEHHTSDDECEPIEAIKFDYVGRARELSFKKGASLLLYQRASDDWWEGRHN
GIDGLIPHQYIVVQDTEGTVVERSSPKSEIEVISEPPEEKVTARAGASCPGGHVADIYLANINKQRKRP
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NRLDSPQIRKATAGRSKSFNNHRPMDPEVIAQDIEATMNSALNELRELERQSSVKHTPDVVLDTLEPLK
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TRTRPLE - GFP Tag - V

Restriction Sites:

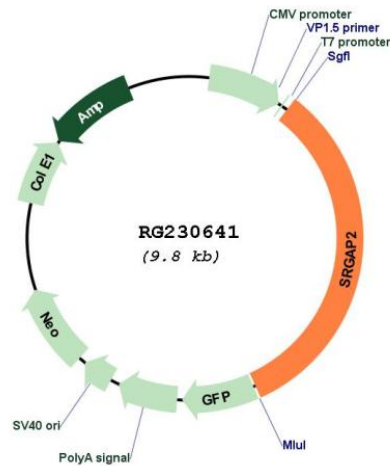
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001170637

ORF Size: 3210 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_001170637.1, NP_001164108.1</u>
RefSeq Size:	6303 bp
RefSeq ORF:	3213 bp
Locus ID:	23380
UniProt ID:	<u>O75044</u>
Cytogenetics:	1q32.1
Protein Pathways:	Axon guidance
Gene Summary:	This locus encodes a member of the SLIT-ROBO Rho GTPase activating protein family. The encoded protein stimulates GTPase activity of Rac1, and plays a role in cortical neuron development. This locus has several paralogs on human chromosome 1 resulting from segmental duplication. While this locus itself is conserved among various species, the paralogs are found only in the genus Homo, and not in the genomes of non-human great apes. Alternatively spliced transcript variants have been described for this locus. [provided by RefSeq, Jul 2014]