

Product datasheet for **RG220057**

Retinal S antigen (SAG) (NM_000541) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Retinal S antigen (SAG) (NM_000541) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Retinal S antigen
Synonyms:	RP47; S-AG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG220057 representing NM_000541 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAGCCAGCGGGAAGACCAGCAAGTCCGAACCGAACCATGTTATCTTCAAGAAGATCTCCCGGGACA
AATCGGTGACCATCTACCTGGGGAACAGAGACTACATAGACCATGTCAGCCAAGTCCAGCCTGTGGATGG
TGTCGTGTGGTTGATCCTGATCTTGTGAAGGAAAGAAAGTGTATGTCCTCTGACCTGCGCCTCCCG
TATGGCCAAGAGGACATTGACGTGATCGGCTTGACCTTCCGACGGGACCTGTACTTCTCCCGGGTCCAGG
TGTATCCTCCTGTGGGGCCGCGAGCACCCACAAAACCTGCAAGAGAGCCTGCTTAAAAAGCTGGGGAG
CAACACGTACCCCTTCTCCTGACGTTTCTGACTACTTGCCCTGTTTCAGTGATGTTGCAGCCAGCTCCA
CAAGATTCAGGGAAGTCTGTGGGGTTGACTTTGAGGTCAAAGCATTGCGCCACAGACAGCACCGATGCCG
AAGAGGACAAAATCCCAAGAAGAGCTCCGTGCGATTACTGATCCGAAAAGTACAGCATGCCCACTTGA
GATGGGTCCCCAGCCCCGAGCTGAGGCGGCTGGCAGTTCTTCATGTCTGACAAGCCCCTGCACCTTGCG
GTCTCTCTCAACAAGAGATCTATTTCCATGGGGAGCCCATCCCTGTGACCGTACTGTACCAATAACA
CAGAGAAGACCGTGAAGAAGATTAAGCATTTCGTGGAACAGGTGGCCAATGTGGTTCTCTACTCGAGTGA
TTATTACGTCAAGCCGTGGCTATGGAGGAAGCGCAAGAAAAAGTGCCACCAACAGCACTTTGACCAAG
ACGCTGACGCTGCTGCCCTTGTGRCTAACAATCGAGAAAGGAGAGGCATTGCCCTGGATGGGAAAATCA
AGCAGGAGACAAAACCTTGCCCTCAGCACCATCATTAAAGGAGGCATAGACCGGACCGTCTGGGAAT
CCTGGTGTCTTACCAGATCAAGGTGAAGCTCACAGTGTGAGGCTTTCTGGGAGAGCTCACCTCCAGTGAA
GTCGCCACTGAGGTCCCATTCCGCCTCATGCACCCTCAGCCTGAGGACCCAGCTAAGGAAAGTTATCAGG
ATGCAAAATTTAGTTTTGAGGAGTTTGCTGCCATAATCTGAAAGATGCAGGAGAAGCTGAGGAGGGGAA
GAGAGACAAGAATGACGTTGATGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG220057 representing NM_000541
 Red=Cloning site Green=Tags(s)

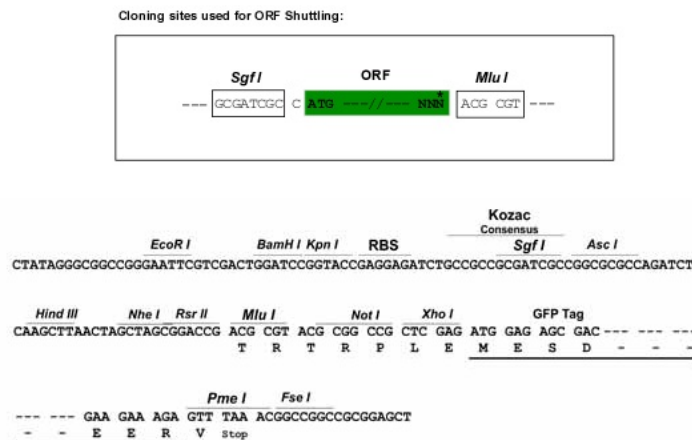
MAASGKTSKSEPNHVIKFKISRDKSVTIYLGNRDYIDHVSQVQPVDGVVLVDPDLVKGKKVYVTLTCAFR
 YGQEDIDVIGLTFRRDLYFSRVQYPPVGAASPTKLQESLLKKLGSNTYPFLLTFPDYLPSCVMLQPAP
 QDSGKSCGVDFEVKAFATDSTDAAEDKIPKKSSVRLLRKRVQHAPLEMGPQPRAEAAWQFFMSDKPLHLA
 VSLNKEIYFHGEPVPTVTVTNTEKTVKKIKAFVEQVANVVL YSSDYVVKPVAMEEAQEKVPPNSTLTK
 TLTLPLLLXNNRERRGIALDGKIKHEDTNLASSTIIKEGIDRTVLGILVSYQIKVKLTVSGFLGELTSSE
 VATEVPFRLMHPQPEDPAKESYQDANLVFEFARHNLKDAGEAEEGKRDKNDVDE

TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja1812_a05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000541

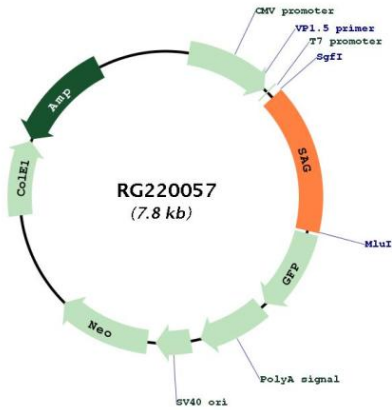
ORF Size: 1215 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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:	NM_000541.2 , NP_000532.1
RefSeq Size:	1564 bp
RefSeq ORF:	1218 bp
Locus ID:	6295
UniProt ID:	P10523
Cytogenetics:	2q37.1
Protein Families:	Druggable Genome
Gene Summary:	Members of arrestin/beta-arrestin protein family are thought to participate in agonist-mediated desensitization of G-protein-coupled receptors and cause specific dampening of cellular responses to stimuli such as hormones, neurotransmitters, or sensory signals. S-arrestin, also known as S-antigen, is a major soluble photoreceptor protein that is involved in desensitization of the photoactivated transduction cascade. It is expressed in the retina and the pineal gland and inhibits coupling of rhodopsin to transducin in vitro. Additionally, S-arrestin is highly antigenic, and is capable of inducing experimental autoimmune uveoretinitis. Mutations in this gene have been associated with Oguchi disease, a rare autosomal recessive form of night blindness. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG220057