

Product datasheet for SC300092

Retinal S antigen (SAG) (NM_000541) Human Untagged Clone

Product data:

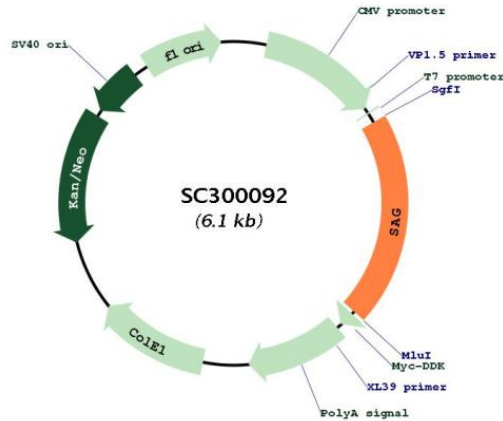
Product Type:	Expression Plasmids
Product Name:	Retinal S antigen (SAG) (NM_000541) Human Untagged Clone
Tag:	Tag Free
Symbol:	SAG
Synonyms:	RP47; S-AG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC300092 representing NM_000541. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTACTATAGGGCGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCAGCCAGCGGGAAGACCAGCAAGTCCGAACCGAACCATGTTATCTTCAAGAAGATCTCCCGGGAC
AAATCGGTGACCATCTACCTGGGGAACAGAGACTACATAGACCATGTCAGCCAAGTCCAGCCTGTGGAT
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ACTTTGACCAAGACGCTGACGCTGCTGCCCTTGTGGCTAACAAATCGAGAAAGGAGAGGCATTGCCCTG
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GAAGCTGAGGAGGGGAAGAGAGACAAGAATGACGTTGATGAGTGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites: Sgfl-MluI



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Plasmid Map:


ACCN: NM_000541

Insert Size: 1218 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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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:	<u>NM_000541.4</u>
RefSeq Size:	1767 bp
RefSeq ORF:	1218 bp
Locus ID:	6295
UniProt ID:	<u>P10523</u>
Cytogenetics:	2q37.1
Protein Families:	Druggable Genome
MW:	45.1 kDa
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]