

Product datasheet for RC220057

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:	Myc-DDK
Symbol:	Retinal S antigen
Synonyms:	RP47; S-AG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC220057 representing NM_000541 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAGCCAGCGGGAAGACCAGCAAGTCCGAACCGAACCATGTTATCTTCAAGAAGATCTCCCGGGACA
AATCGGTGACCATCTACCTGGGGAACAGAGACTACATAGACCATGTCAGCCAAGTCCAGCCTGTGGATGG
TGTCGTGTGGTTGATCCTGATCTTGTGAAGGAAAGAAAGTGTATGTCACTCTGACCTGCGCCTCCGC
TATGGCCAAGAGGACATTGACGTGATCGGCTTGACCTCCGCAGGGACCTGTACTTCTCCGGGTCCAGG
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CAACACGTACCCCTTCTCCTGACGTTTCTGACTACTTGCCCTGTTCAAGTATGTTGCAGCCAGCTCCA
CAAGATTCAGGGAAGTCTGTGGGGTTGACTTTGAGGTCAAAGCATTCCGCCACAGACAGCACCGATGCCG
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GATGGGTCCCCAGCCCCGAGCTGAGGCGGCTGGCAGTTCTTCAATGTCTGACAAGCCCCTGCACCTTGGC
GTCTCTCAACAAGAGATCTATTTCCATGGGGAGCCCATCCCTGTGACCGTACTGTACCAATAACA
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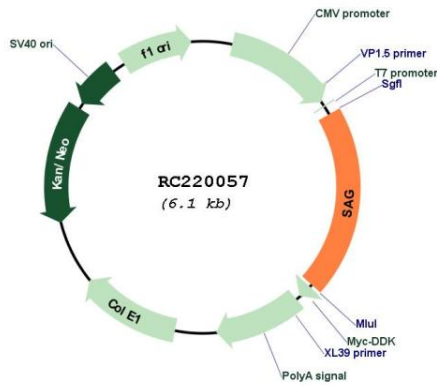
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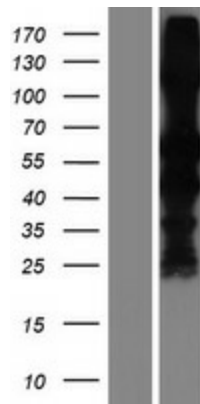
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OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_000541.5
RefSeq Size:	1564 bp
RefSeq ORF:	1218 bp
Locus ID:	6295
UniProt ID:	P10523
Cytogenetics:	2q37.1
Protein Families:	Druggable Genome
MW:	44.9 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]

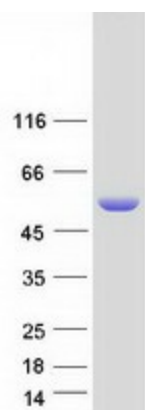
Product images:



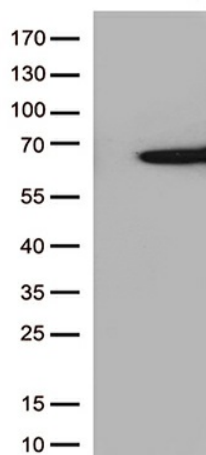
Circular map for RC220057



Western blot validation of overexpression lysate (Cat# [LY424652]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220057 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SAG protein (Cat# [TP320057]). The protein was produced from HEK293T cells transfected with SAG cDNA clone (Cat# RC220057) using MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SAG (Cat# RC220057, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SAG (Cat# [TA812590])(1:500). Positive lysates [LY424652] (100ug) and [LC424652] (20ug) can be purchased separately from OriGene.