

Product datasheet for **RG222562**

SA1 (STAG1) (NM_005862) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: SA1 (STAG1) (NM_005862) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: STAG1
Synonyms: MRD47; SA1; SCC3A
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG222562 representing NM_005862
Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

ATGATTACTTCAGAATTACCAAGTGTACAGGATCAACTAATGAACTACTGCCATTCCGATGCTGGCA
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AGCTCTCAAGAACTGTTGAAAGACTGGGAATGTATGACAGAGTTGCTATTAGAAGAACCTGTTCAAGGAG
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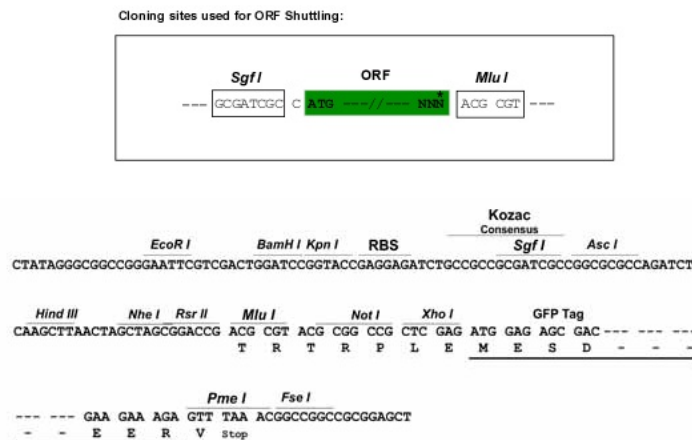
Protein Sequence: >RG222562 representing NM_005862
 Red=Cloning site Green=Tags(s)

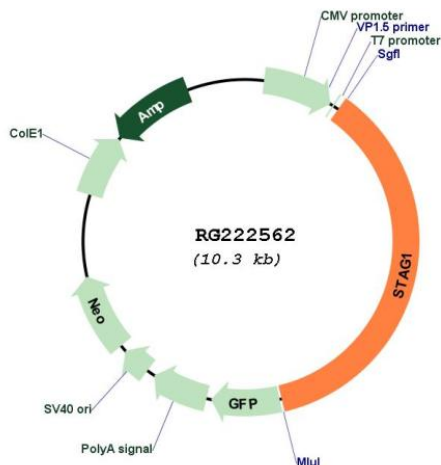
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 FHNADLTKWDLFGNCYRLKGTIEHGAMPEQIVVQALQC SHYSILWQLVKITDGSPSKEDLLVLRKTVK
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 QDEENQSMEGDEEDEANKIEALHKRRNLLAAF SKLIIYDIDVMHAAADIFKHMYKYYNDYGDIIKETLSK
 TRQIDKIQA KATLILSLQQLFNELVQE QGPNDRTSAHVSGIKELARRFALTFLGDQIKTREA VATLHKD
 GIEFAFKYQNKQGEYPPNLAFLVLELSEFSSKLLRQDKKTVHSYLEKFLTEQMERRREDVWLPLISYRN
 SLVTGGEDDRMSVNSGSSSSKTSVRNKKGRPPLHKKRVEDESLDNTWLNRTDTMIQTPGPLPAPQLTST
 VLRENSRPMGDQIQEPESEHGSEPDFLHNPQMQISWLGP KLEDLNRKDRGTGMNYMKVRTGVRHAVRGLM
 EEDAEP IFEDVMMSSRSQLEDMNEEFEDTMVIDLPPSRNRRERAE LRPDFD SAAIIEDDSGFGMPMF

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_005862

ORF Size: 3774 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_005862.3](#)

RefSeq Size: 5166 bp

RefSeq ORF: 3777 bp

Locus ID: 10274

UniProt ID: [Q8WVM7](#)

Cytogenetics: 3q22.3

Domains: STAG

Protein Families: Druggable Genome

Protein Pathways: Cell cycle

Gene Summary: This gene is a member of the SCC3 family and is expressed in the nucleus. It encodes a component of cohesin, a multisubunit protein complex that provides sister chromatid cohesion along the length of a chromosome from DNA replication through prophase and prometaphase, after which it is dissociated in preparation for segregation during anaphase. [provided by RefSeq, Jul 2008]