

## Product datasheet for **RG221017**

### SA2 (STAG2) (NM\_001042751) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SA2 (STAG2) (NM_001042751) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	STAG2
Synonyms:	bA517O1.1; HPE13; MKMS; NEDXCF; SA-2; SA2; SCC3B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG221017 representing NM_001042751 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGATAGCAGCTCCAGAAATACCAACTGATTTTAACTACTACAGGAGTCAGAAACACATTTTTCTTCTG  
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CTGCTGAAAGACTGGAATGTATGAATAGCTTGTTACTGGAAGAGCCACTTAGTGGAGAGGAAGCACTAA  
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TCTTTGATCCAGCTTCAATTATGGATGAATCAGTCTTGGAGTGTCAATGTTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG221017 representing NM\_001042751  
 Red=Cloning site Green=Tags(s)

MIAAPEIPTDFNLLQESETHFSSDTDFEDIEGKNQKQGKGTCKKGGKPAEKGGNGGGKPPSPGNRM  
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 NNSADGQQEDEASKIEALHKRRNLLAAFCKLIVYTVVEMNTAADIFKQYMKYYNDYGDIIKETMSKTRQI  
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 GGDDDTMSVISGISSRGSTVRSKSKPSTGKRKVVVEGMQLSLTESSSDSMWL SREQTLHTPVMQTPQ  
 LTSTIMREP KRLRPEDSFMSVYPMQTEHHQTPLDYNRRGTSLMEDDEEPIVEDVMMSSSEGRIEDLNEGMD  
 FDTMDIDLPPSKNRRRETELKPDFDFPASIMDESVLGVSMF

TRTRPLE - GFP Tag - V

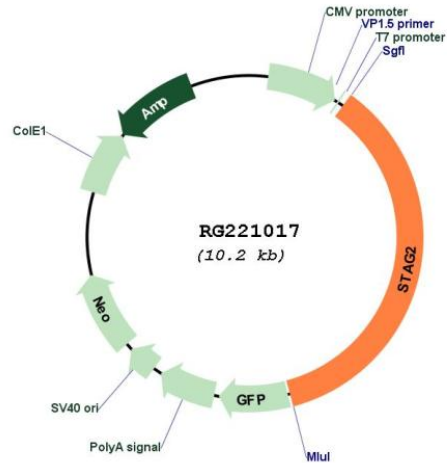
Restriction Sites:

SgfI-MluI

Cloning Scheme:



## Plasmid Map:



ACCN: NM\_001042751

ORF Size: 3693 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\\_001042751.2](#)

RefSeq Size: 6075 bp

RefSeq ORF: 3696 bp

Locus ID: 10735

UniProt ID: [Q8N3U4](#)

Cytogenetics: Xq25

**Protein Pathways:** Cell cycle

**Gene Summary:** The protein encoded by this gene is a subunit of the cohesin complex, which regulates the separation of sister chromatids during cell division. Targeted inactivation of this gene results in chromatid cohesion defects and aneuploidy, suggesting that genetic disruption of cohesin is a cause of aneuploidy in human cancer. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2013]