

## Product datasheet for **RC240063**

### SA2 (STAG2) (NM\_001282418) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SA2 (STAG2) (NM_001282418) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SA2
Synonyms:	bA517O1.1; HPE13; MKMS; NEDXCF; SA-2; SA2; SCC3B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC240063 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGATAGCAGCTCCAGAAATACCAACTGATTTTAACTACTACAGGAGTCAGAAACACATTTTTCTTCTG  
ACACAGATTTTGAAGATATCGAAGGAAAAACCAAAAGCAAGGCAAGGCAAACTTGTAAAAAGGCAA  
AAAGGGCCAGCAGAAAAGGGCAAAGGTGGAAATGGAGGAGGAAAACCTCCTTCTGGTCCAAACCGAATG  
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CTATGCAGTCGGTGGTAGATGATTGGATAGAATCATAAAGCATGACCGAGATATAGCACTTCTTGACCT  
TATCAACTTTTTTATTCAGTGTTTCAGGCTGTAAAGGAGTTGTACAGCAGAAATGTTTAGACATATGCAG  
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CAAGTCAGAGCATTTCGACATACAAGCACCTGGCAGCTATGAAGTTGATGACAGCTTTGGTGAATGTGG  
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AAAACGAGCCAATGAGAGGCTAGAATCCTGCTACAAAAGCGGAAAGAGCTTCAGGAAAAATCAAGATGAA  
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GAATTGTGCTATGACCCTTGACAAAGAATATGATGTTGCAGTACAAGCAATAAAATTACTCACTTGT  
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CTGCTGAAAGACTGGAATGTATGAATAGCTTGTTACTGGAAGAGCCACTTAGTGGAGAGGAAGCACTAA  
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TCTTTGATCCAGTTCATTTATGGATGAATCAGTCTTGAGTGTCAATGTTT

ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC240063 protein sequence  
 Red=Cloning site Green=Tags(s)

MIAAPEIPTDFNLLQESETHFSSDTDFEDIEGKNQKQGKGTCKKGKGPAAEKGGNGGGKPPSPGNRM  
 NGHHQNGVENMMLFEVVKMGKSAMQSVVDDWIESYKHDRDIALLDLINFFIQCSGCKGVVTAEMFRHMQ  
 NSEIIRKMTTEEFDEDSGDYPLTMAGPQWKFKSSFCEFIGVLVRQCQYSIIYDEYMMDTVISLLTGLSDS  
 QVRAFRTSTLAAMKLMALVNVALNLSINMDNTQRQYEAERNKMIKQRANERLELLLQKRKELQENQDE  
 IENMMNAIFKGVFVHRYRDAIAEIRAICIEEIGIWMKMYSDAFLNDSYLKYVGTMMHDKQGEVRLKCLTA  
 LQGLYNNKELNSKLELFTSRFKDRIVSMTLDKEYDVAVQAIKLLTLVLQSSEEVLTAECCENVYHLVYSA  
 HRPVAVAAAGEFLYKFLSRRDPEEDGMMKRRRQGPANLVKTLVFFLESELHEHAAYLVDSMWDCAE  
 LLKDWECMNSLLLEEPLSGEEALTDRQESALIEIMLCTIRQAAECHPPVGRGTGKRVLTAKKTKLDDR  
 TKITELFAVALPQLLAKYSVDAEKVTNLLQLPQYFDLEIYTTGRLEKHL DALLRQIRNIVEKHTD TDVLE  
 ACSKTYHALCNEEFTIFNRVDIRSQLIDELADKFNRLLEDFLQEGEEDDDAYQVLSTLKRTAFHNA  
 HDLSKDWL FACNYKLLKGTIENGDMPEQIVIHALQCTHYVILWQLAKITESSTKEDLLRLKQMRVFCQ  
 ICQHLYTNVNTTVKEQAF TILCDILMIFSHQIMSGGRDML EPLVYTPDSSLQSELLSFILDHVFIEQDDD  
 NNSADGQQEDEASKIEALHKRRNLLAAFCKLIVYTVVEMNTAADIFKQYMKYYNDYGDIIKETMSKTRQI  
 DKIQCAKTLILSLQQLFNEMIQENGYNFDRSSSTFSGIKELARRFALTFGLDQLKTREAIAMLHKDGI EF  
 AFKEPNPQGESHPPLNLAFLDILSEFSSKLLRQDKRTVYVYLEKFMFQMSLRREDVWLPLMSYRNSLLA  
 GGDDDTMSVISGISSRGSTVRSKSKPSTGKRKVVVEGMQLSLTESSSDSMWLSREQTLHTPVMMQTPQ  
 LTSTIMREP KRLRPEDSFMSVYPMQTEHHQTPLDYNRRGTSLMEDDEEPIVEDVMMSSSEGRIEDLNEGMD  
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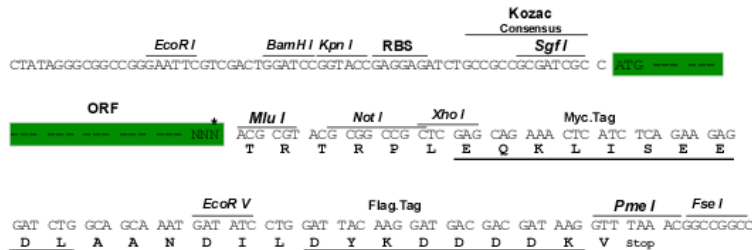
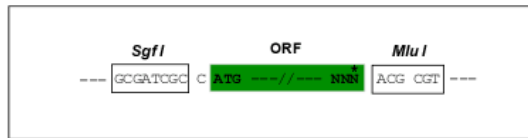
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



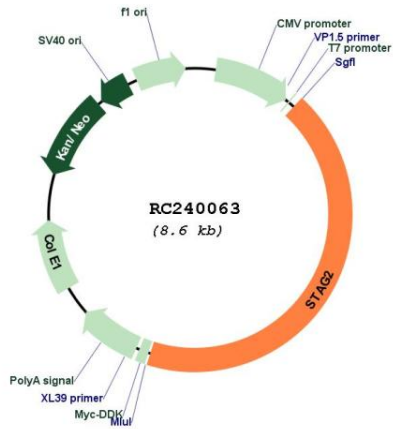
\* The last codon before the Stop codon of the ORF

ACCN: NM\_001282418

ORF Size: 3693 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001282418.2</a>
<b>RefSeq Size:</b>	6047 bp
<b>RefSeq ORF:</b>	3696 bp
<b>Locus ID:</b>	10735
<b>UniProt ID:</b>	<a href="#">Q8N3U4</a>
<b>Cytogenetics:</b>	Xq25
<b>Protein Pathways:</b>	Cell cycle
<b>MW:</b>	141.3 kDa
<b>Gene Summary:</b>	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]

Product images:



Circular map for RC240063