

## Product datasheet for **RC200261**

### SA2 (STAG2) (NM\_006603) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** SA2 (STAG2) (NM\_006603) 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:** >RC200261 representing NM\_006603  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGATAGCAGCTCCAGAAATACCAACTGATTTTAACTACTACAGGAGTCAGAAACACATTTTTCTTCTG  
 ACACAGATTTTGAAGATATCGAAGGAAAAACCAAAAGCAAGGCAAGGCAAAACCTTGTAAGGCA  
 AAAGGGCCAGCAGAAAAGGGCAAAGGTGGAAATGGAGGAGGAAAACCTCCTTCTGGTCCAAACCGAATG  
 AATGGTCATCACCAACAGAATGGAGTGGAAAACATGATGTTGTTGAAGTTGTTAAAATGGCAAGAGTG  
 CTATGCAGTCGGTGGTAGATGATTGGATAGAATCATAAAGCATGACCGAGATATAGCACTTCTTGACCT  
 TATCAACTTTTTTATTCAGTGTTGAGGCTGTAAAGGAGTTGTACAGCAGAAATGTTTAGACATATGCAG  
 AACTCTGAGATAATTCGAAAAATGACTGAAGAATTCGATGAGGATAGTGGAGATTATCCACTTACCATGG  
 CTGGTCCCTCAGTGAAGAAGTTCAAATCCAGTTTTTGTGAATTCATTGGCGTGTTAGTACGGCAATGTCA  
 ATATAGTATCATATATGATGAGTATATGATGGATACAGTCATTTCACTTCTTACAGGATTGTCTGACTCA  
 CAAGTCAGAGCATTTCGACATACAAGCACCTGGCAGCTATGAAGTTGATGACAGCTTGGTGAATGTGG  
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 AAAACGAGCCAATGAGAGGCTAGAATCCTGCTACAAAAGCGGAAAGAGCTTCAGGAAAAATCAAGATGAA  
 ATAGAAAATATGATGAATGCAATATTTAAAGGAGTGTTGTACATAGATACCGTGATGCGATAGCTGAAA  
 TTCGAGCTATTTGCATTGAAGAGATTGGCATTGGATGAAGATGTATAGTATGCCTTTCTTAATGACAG  
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 CACCGGCCAGTAGCAGTAGCAGCTGGAGAATTTCTCTACAAAAGCTCTTCAGTCGTAGAGATCCAGAGG  
 AGGATGGAATGATGAAAAGAAGAGGAAGACAAGGTCCAAATGCCAACCTTGTTAAGACATGGTTTTTTT  
 CTTTCTAGAAAGTGAGTTACATGAGCATGCAGCATACCTTGTGGATAGCATGTGGGACTGTGCTACTGAG



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CTGCTGAAAGACTGGAATGTATGAATAGCTTGTTACTGGAAGAGCCACTTAGTGGAGAGGAAGCACTAA  
CAGATAGGCAAGAGAGTGCTCTGATTGAAATAATGCTTTGTACCATAGACAAGCGGCTGAATGTCATCC  
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GGTGGTGTGATGACACCATGTCAGTCATTAGTGAATCAGCAGCCGGGGTCAACAGTACGGAGTAAAA  
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TGCAGACTGAACATCATCAACACCTCTTGATTATAATCGGCGTGGCACAAGCCTAATGGAAGATGATGA  
AGAGCCAATTGTGAAGATGTTATGATGCCTCAGAAGGGAGGATTGAGGATCTTAAATGAGGGAATGGAT  
TTTGACACCATGGATATAGATTTGCCACCATCAAAGAACAGACGAGAGAGAACAAGAACTGAAGCCTGATT  
TCTTTGATCCAGCTTCAATTATGGATGAATCAGTCTTGGAGTGTCAATGTTT

ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC200261 representing NM\_006603  
 Red=Cloning site Green=Tags(s)

MIAAPEIPTDFNLLQESETHFSSDTDFEDIEGKNQKQGKGTCKKGKGPAAEKGGNGGGKPPSPGNRM  
 NGHHQNGVENMMLFEVVKMGKSAMQSVVDDWIESYKHDRDIALLDLINFFIQCSGCKGVVTAEMFRHMQ  
 NSEIIRKMTTEEFDEDSGDYPLTMAGPQWKFKSSFCEFIGVLVRQCQYSIIYDEYMMDTVISLLTGLSDS  
 QVRAFRTSTLAAMKLMALVNVALNLSINMDNTQRQYEAERNKMIKCRANERLELLLQKRKELQENQDE  
 IENMMNAIFKGVFVHRYRDAIAEIRAICIEEIGIWMKMYSDAFLNDSYLKYVVGWMTMHDKQGEVRLKCLTA  
 LQGLYNNKELNSKLELFTSRFKDRIVSMTLDKEYDVAVQAIKLLTLVLQSSEEVLTAEDECENVYHLVYSA  
 HRPVAVAAAGEFLYKLLFSRRDPEEDGMMKRRRQGPANLVKTLVFFLESELHEHAAYLVDSMWDCAE  
 LLKDWECMNSLLLEPLSGEEALTDRQESALIEIMLCTIRQAAECHPPVGRGTGKRVLTAKKTKLDDR  
 TKITELFAVALPQLLAKYSVDAEKVTNLLQLPQYFDLEIYTTGRLEKHLDALLRQIRNIVEKHTDTDVLE  
 ACSKTYHALCNEEFTIFNRVDIRSQLIDELADKFNRLLEDFLQEGEEDDDAYQVLSTLKRTAFHNA  
 HDLSKDWLFCNYKLLKGTIENGDMPEQIVIHALQCTHYVILWQLAKITESSTKEDLLRLKQMRVFCQ  
 ICQHLYLTVNNTVKEQAFILCDILMIFSHQIMSGGRDMLVYTPDSSLQSELLSFILDHVFIEQDDD  
 NNSADGQEQEASKIEALHKRRNLLAAFCKLIVYTVVEMNTAADIFKQYMKYYNDYGDIIKETMSKTRQI  
 DKIQCAKTLILSLQQLFNEMIQENGFNDRSSSTFSGIKELARRFALTFGLDQLKTREAIAMLHKDGI  
 AFKEPNPQGESHPPLNLAFLDILSEFSSKLLRQDKRTVYVYLEKFMFQMSLRREDVWLPLMSYRNSLLA  
 GGDDDTMSVISGISSRGSTVRSKSKPSTGKRKVVVEGMQLSLTESSSDSMWLSREQLTHTPVMQTPQ  
 LTSTIMREPRLRPEDSFMSVYPMQTEHHQTPLDYNNRRGTSLMEDDEEPIVEDVMMSSSEGRIEDLNEGMD  
 FDTMDIDLPPSKNRRRETELKPDFDPASIMDESVLGVSFMF

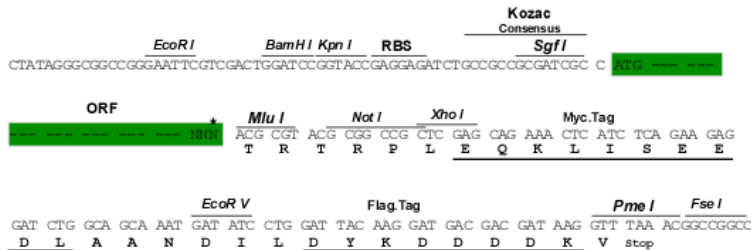
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



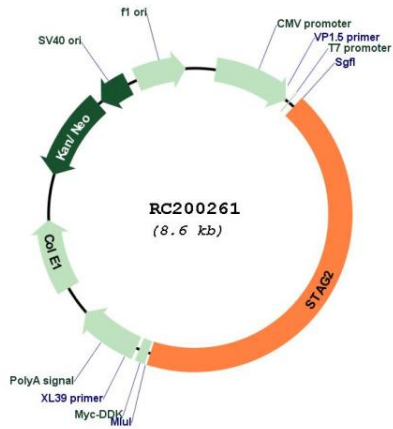
\* The last codon before the Stop codon of the ORF

ACCN: NM\_006603

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_006603.5</a>
<b>RefSeq Size:</b>	6010 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>Domains:</b>	STAG
<b>Protein Pathways:</b>	Cell cycle
<b>MW:</b>	141.1 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 RC200261