

## Product datasheet for **SC315360**

### SOS2 (NM\_006939) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SOS2 (NM_006939) Human Untagged Clone
Tag:	Tag Free
Symbol:	SOS2
Synonyms:	NS9; SOS-2
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_006939 edited  
 ATGCAGCAGGCCGCGCAGCCTTACGAGTTCTTCAGCGAGGAGAACAGTCCGAAATGGCGG  
 GGACTGTTGGTCTCGGCCCTGCGGAAGGTTGAGGAAAGTGCATCCCCTCTCAGCT  
 AATGAAGAGTCTCTATTATATTGAAGAGCTGATTTTTTCAGCTGCTTAATAAATTATGC  
 ATGGCCAGCCAAGGACTGTTCAAGATGTAGAGGAGCGAGTTCAGAAGACCTTCTCAGC  
 CCAATTGATAAATGGCCATTGCTGATGCAACAATCTGCTATAGAAAAACGAAAACGAAGA  
 AATCCTCTTTTACTGCCTGTGGACAAAATCCATCCTTCGTTGAAGGAAGTATTAGGGTAC  
 AAAGTGGACTACCATGTATCCCTATATATTGTGGCTGACTAGAGTATATCTCAGCTGAT  
 ATTTTAAATGGCTGGTAATTATGTTTTAATATCCGGCATTATGAAATATCTCAGCAG  
 GACATTAAGTGTCAATGTGTGCGGATAAGTTTTGATGGACATGTTTGATCAGGATGAC  
 ATAGGTTTGGTTTCTCTGTGAAGATGAACCTAGTTCTTCTGGTGAATTAACACTAT  
 GATCTTGTGAGAACTGAAATCGCAGAAGAAAGACAGTATCTACGGGAATTAATATGATC  
 ATAAAAGTGTTCGAGAAGCCTTTCTTTCTGATAGAAAGCTGTTTAAACCTTCTGATATC  
 GAAAAGATTTTTAGTAACATTTAGATATACATGAATTGACTGTGAACTTTTAGGTTTG  
 ATTGAAGACACAGTTGAAATGACTGATGAAAGCAGTCCTCATCCCTTAGCTGGCAGCTGT  
 TTTGAAGATTTGGCAGAAGAGCAAGCATTGATCCTTATGAAACATTATCACAGGACATT  
 CTTTCACCAGAGTTTCATGAACATTTCAATAAATTGATGGCCAGACCTGCAGTTGCTCTA  
 CACTTTTCAGTCCATTGCTGATGGTTTTAAAGAGGCAGTTCGTTATGTCCTTCCACGTCTT  
 ATGCTGGTGCCAGTGTATCACTGTTGGCACTACTTTGAGTTACTAAAGCAATTGAAAGCA  
 TGTAGTGAAGAACAAGAAGACAGAGAATGTTTGAACCAAGCTATTACTGCTCTCATGAAT  
 CTCCAAGGTAGCATGGACCGAATTTACAAGCAGTATTCACCTAGACGTCGACCTGGAGAT  
 CCTGTTTGCCCTTTTATAGTCACCAATTAAGAAGCAAACACCTGGCTATCAAAAAAATG  
 AATGAAATTCAGAAAAATATCGATGGATGGGAAGGCAAAGATATTGGACAGTGTGTAAT  
 GAATTCATTATGGAGGGACCATTGACAAGAATCGGTGCCAAACATGAACGGCATATTTTT  
 CTGTTTGTAGGCTTAATGATCAGTTGTAACCTAATCATGGCCAGACTCGGCTTCCAGGT  
 TACAGTAGTGCAGAATACAGGTTAAAAGAAAAATTTGTCATGAGGAAAAACAAAATTTGT  
 GATAAAGAAGATACTTGTGAGCACAAGCATGCATTTGAATTAGTATCCAAAGATGAGAAC



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AGCATAATATTTGCTGCTAAGTCTGCTGAAGAAAAAACAACCTGGATGGCAGCCCTTATT  
TCTCTTCATTATCGTAGTACTCTAGATCGAATGTTAGATTAGTATTATTGAAAGAAGAA  
AATGAGCAACCACTGAGATTACCAAGTCTGAAGTATATCGTTTTGTAGTAAAAGACTCT  
GAGGAAAAATTGTTTTGAAGACAACCTGCAAAGTAGAAGTGGCATCCCCATTATTA  
GGAGAACTGTAGTGAATTAATTGAAAGGTTAACATATCATATGTATGCAGATCCCAAT  
TTTGTTCGTAATTTCTTACCACATATCGTTTATTTGTAAACCCAGGAATTGCTGAGC  
TTACTGATTGAACGGTTTGAATTCAGAGCCAGAACCTACTGACGCAGACAAATTGGCA  
ATAGAGAAAGGCGAGCAGCCAATCAGTGCAGACCTTAAAAGATTTCGCAAGGAATATGTC  
CAACCAGTACAACCTTAGGATCTTAAATGTATTTTCGGCATTGGGTTGAACATCATTTTTAT  
GACTTTGAAAGAGACTTGGAAATTGCTTGAAGACTAGAATCCTTCATTTCAAGTGAAGA  
GGGAAAGCTATGAAAAATGGGTAGAGTCAATTGCTAAGATCATCAGGAGGAAGAAGCAA  
GCTCAGGCAAACGGAGTAAGCCATAATATTACCTTTGAAAGTCCACCTCCACCAATTGAA  
TGGCATATCAGCAAACAGGACAGTTTGAACATTTGATCTCATGACACTTCATCCAATA  
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GAACCTGTAGGGAGTGTGTGGACCAAAGAAGATAAAGAAATAAATCTCCAAATTTATTA  
AAAATGATTCCGCATACCACAAATCTCACCTCTGGTTTGA AAAATGCATTGTGGAGCA  
GAAAATTTTGAAGAACGGGTGGCAGTACTAAGTAGAATTATAGAAATTTCTGCAAGTTTTT  
CAAGATTTGAATAATTTCAATGGCGTATTGGAGATAGTCAAGTGCAGTAAATTCAGTGTCA  
GTATACAGACTAGACCATACCTTTGAGGCACTGCAGGAAAGGAAAAGGAAAATTTTGGAC  
GAAGCTGTGGAATTAAGTCAAGTCACTTTAAAAAATACCTAGTAAAACCTAAGTCAATC  
AATCCACCTTGTGTGCCTTTTTTTGAATATATTTAACAAATATTCTGAAGACCGAAGAA  
GGGAATAATGATTTTTTAAAAAGAAAGGAAAGATTTAATCAATTTTCAAGTAAAGGAGG  
AAAGTAGCTGAAATTAAGTGGAGAAATTCAGCAGTATCAGAATCAGCCTTACTGTTTACGG  
ATAGAACCAGATATGAGGAGATTCTTTGAAAACCTTAAACCCCATGGGAAGTGCATCTGAA  
AAAGATTTACAGATTATTTGTTCAACAAGTCACTAGAAAATTGAACCTCGAAACTGCAAA  
CAGCCACCTCGATTTCTAGGAAATCAACTTTTTCTTAAAAATCTCCTGGAATAAGGCT  
AACACAGGCCGACATGGCTCTACCTCAGGTAATTTACGAGGTACCCCAACACCATTAGAA  
AGAGAACCATGTAATAAAGCTTTAGTCGGATTGCTGAAACTGAGCTGGAATCAACAGTG  
TCAGCACCAACCTCTCCAAATACACCATCTACTCCACCAGTATCTGCTTCTCAGACCTT  
AGTGTATTTTAGATGTGGATCTCAACAGCTCCTGTGGCAGCAATAGCATCTTTGCTCCA  
GTGCTTTTGCACATTCAAAGTCTTTCTTTAGTTCATGTGGTAGTTTACATAAACTAAGT  
GAAGAGCCCTGATTCTCCTCCTCTTCTCCTCGAAAAAAGTTTGATCATGATGCTTCA  
AATTTCAAGGGAATATGAAATCTGATGATGATCCTCCTGCTATTCCACCAGACAGCCT  
CCTCCTCAAAGGTAACCCAGAGTTCCTGTTCTACTGGTGCATTTGATGGGCTCTG  
CATAGTCCACCTCCGCCACCACCAAGAGATCCTCTTCTGATACCCCTCCACCAGTTCCC  
CTTCGGCTCCAGAACCTTTATAAACTGTCCATTTAATCTTCAGCCACCTCCACTGGGG  
CATCTTACAGAGATTGACTGGCTCAGAGACATTAGTACGTGTCCAAATTCGCCAAGC  
ACTCCTCTAGCACACCTCTCCAAGGGTACCGCGTCGATGCTATGTGCTCAGTTCTAGT  
CAGAATAATCTTGCTCATCTCCAGCTCCCCCTGTTCCACCAAGGCAGAATTCAAGCCCT  
CATCTGCCAAAAGTCCACCAAAGACTTACAAACGGGAGCTTTCGCACCCCCATTGTAC  
AGACTGCCTTTGCTAGAAAATGCAGAACTCCCAATGA

**Restriction Sites:**

Please inquire

**ACCN:**

NM\_006939

**Insert Size:**

4000 bp

**OTI Disclaimer:**

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

<b>OTI Annotation:</b>	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
<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>	<u><a href="#">NM_006939.1</a></u> , <u><a href="#">NP_008870.1</a></u>
<b>RefSeq Size:</b>	3999 bp
<b>RefSeq ORF:</b>	3999 bp
<b>Locus ID:</b>	6655
<b>UniProt ID:</b>	<u><a href="#">Q07890</a></u>
<b>Cytogenetics:</b>	14q21.3
<b>Protein Pathways:</b>	Acute myeloid leukemia, B cell receptor signaling pathway, Chemokine signaling pathway, Chronic myeloid leukemia, Colorectal cancer, Dorso-ventral axis formation, Endometrial cancer, ErbB signaling pathway, Fc epsilon RI signaling pathway, Focal adhesion, Gap junction, Glioma, GnRH signaling pathway, Insulin signaling pathway, Jak-STAT signaling pathway, MAPK signaling pathway, Natural killer cell mediated cytotoxicity, Neurotrophin signaling pathway, Non-small cell lung cancer, Pathways in cancer, Prostate cancer, Regulation of actin cytoskeleton, Renal cell carcinoma, T cell receptor signaling pathway
<b>Gene Summary:</b>	This gene encodes a regulatory protein that is involved in the positive regulation of ras proteins. Mutations in this gene are associated with Noonan Syndrome-9. [provided by RefSeq, Jul 2016]