

## Product datasheet for MC224217

### Sos1 (NM\_009231) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Sos1 (NM_009231) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Sos1
Synonyms:	4430401P03Rik; 9630010N06; A1449023
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC224217 representing NM_009231 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGCAGGCGCAGCAGCTGCCTTACGAGTTTTTCAGCGAGGAGAACGCGCCAAGTGGCGGGGCTGCTGG  
TGCTCGCTGAAAAAGTTTCAGGGCAAGTTCACCTACTCTTGAGTCTAATGATGATGCTCTTCAGTA  
TGTTGAAGAATTAATTTGCAATTAATAATATGCTATGCCAAGCTCAGCCCCGAGTGTTCAGATGTG  
GAGGAACGTGTTCAAAGAGTTTTCTCATCCAATTGATAAGTGGCAATAGCTGATGCCAATCAGCCA  
TTGAAAAGAGGAAGAGACGAAATCCTTTATCGCTGCCAGCAGAAAAGAAATTCATCATTTATTAAGGGAGT  
CCTCGTTATAAAATTGACCACCAGTTTCTGTTTACATAGTAGCAGTATTAGAATACATTTCTGCAGAT  
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TTAACTGATGAAGAGCCTCCACCTCAGGAGAACAACCTATTATGATTTGGTAAAAGCATTTCATGGCA  
GAAATTCGACAGTATAAAGAGAATTAATCTAATTATAAAAGTTTTTCGAGAGCCCTTTGCTCTAATT  
CCAAATTTTTCATCTAATGATGTAGAAAACATATTCAGTCGTATAGTAGATACATGAACCTTAGTGT  
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GACCCGATTCCATGGCCATTTTCTTAGTCAGTTATCAAAGCCTGGGGCAGCACTTTATTTGCAGTCCAT  
AGGCGAAGGCTTCAAAGAAGCTGTCCAGTACGTCCTGCCCGGCTGCTGTTGCCCTGTGTACCACTGT  
CTGCATTACTTTGAACCTCTGAAGCAGTTAGAAGAAAAGAGTGAAGATCAAGAAGACAAGGAGTGTATGA  
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ACGAAGACTAAGTGAAGTCTGCATGTCGGTTTTACAGCCAGCAGATGAAGGGGAAACAGCTAGCCATCAAG  
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TCATAATGGAAGGAACTTTACACGTGTAGGAGCCAAACACGAGAGACACATATTTCTCTTCGATGGCTT  
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TTGAAATCATTCTGAAAGATGGCAATAGTGTATATTTTCTGCCAAGTCAGCTGAAGAGAAAAACA  
 GATGGCAGCACTGATCTCTTTGCAGTACCGCAGCACCCCTGGAGAGGATGCTGGACGTAACGGT  
 GCTGCAGGAGGAGGAGGAGCAGATGAGGCTGCCAGTGTGAAGTGTACAGGTTTGAGAACCTG  
 ACTCCGAGGAGAATATTCGAAGAGAATGTGCAGCCAAAGCTGGGATCCCCATTATCAAGGCAG  
 GGACAGTGTCTAAAGCTCATTGAGAGGCTTACCTACCACATGTACGCAGATCCAAATTTTGT  
 TCGGACGTTTCTTACAACA TACAGGTCCTTTTGCAGACCTCAAGAACTACTGAGTCTTCTGAT  
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 AGATCAGCCCCCTGAGTGCAGAGCTGAAGAGGTTAGAAAAGGAATATTCAGCCTGTGCAGT  
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 ATGGGTGCAATCCATCACTAAGATAATCCAAAGGAAAAAATGCAAGAGACAAATGGCCCAG  
 GTCATAACATTACATTTTACAGAGCTCACCTCCCACAGTTGAGTGGCACATAAGCAGACCTGG  
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 CTTTGTGGTTTGGAAAATGTATTGTA GAAACAGAAAACCTAGAAGAAAGAGTAGCTGTAGT  
 AAGTCGGATAATTGAGATTCTACAAGTCTTCAAGAGCTGAACAACTCAATGGTGTCTGGA  
 AGTTGTCAAGTCTCACCTGTTACAGACTAGA CCACACATTTGAGCAAAATACCAAGCAGACA  
 AAAAGAAAATTTAGAAGAAGCTCATGAATTGAGTGAAGTCACTATAAGAAATATTTGGCAAA  
 ACTCAGGTCTATTAATCCACCGTGTGTGCCTTTCTTTGGAATTTATC TCACAAATATCCT  
 GAAGACAGAAGAGGGCAACCCTGAGGTCTGAGGAGACACGGGAAAGAGCTTATTAAC  
 TTCAGCAAGAGGAGGAGAGTGGCCGAGATCACAGGCGAGATCCAGCAGTACCAGAACCGCC  
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 AGCATGGAGAAAG AATTTACAGACTATCTGTTCAACAAATCCCTAGAAATAGAACCCCGC  
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 TCCATCAAATCCAAGACCAGGAACCATG AGACATCCACACCTCTGCAGCAGGAGCCAAGA  
 AAAATTAGCTACAGTCGGATTCTGAAAGTGAGACGGAAAGCACAGCATCTGCACCAAACT  
 CCCCTCGGACCCCACTGACGCGCCCTGCATCTGGCACCTCCAGCAACACAGATGTTTGCAG  
 CGTGTTCGATTCTGACCACTCGGCAAGCCCTTTTCAATCAAGATCTGCTTCA GTCTCAT  
 TATAAGTTTATCCAAGGGCACTGATGAAGTGCCTGTCCCCCTCCTGTACCCCTCGAAGAC  
 GTCCAGAGTCTGCCCCAGCTGAATCCTCCCATCCAAGATTATGTCTAAGCACTGGACAGC  
 CCCCCAGCTATTCTCCTAGCAACCCACATCCAAAGCCTATTCACCAGCTATTCAATATCAG  
 ATCGGACCTCTATA TCAGATCCTCCTGAAAGCCCTCCCTTGTACCACCACGGGAACCTGT  
 GAGGACACCTGATGTTTTCTCAA GCTCACCATTACATCTCCAACCTCCTCCTTTGGGCA  
 AAAAGAGTATCATGGCAACGCTTCTTCCCAA CAGCCATCCCCTTTTACACCGCCACCC  
 CCAACCCCTCTCCTCATGGCAGCAGAAGGCATCTGCCA TCACCACCACTGACACAGGAG  
 ATGGACCTCCATTCCATTGCTGGGCCCTCTGTTCCCTCCACGACAAAAGCA CTTCTCA  
 ACTTATCCCCAACTCCCTCCAAAACTTACAAAAGGGAGCACACACCCATCCATGCATAG  
 AGATGGACCACCACTGCTGGAGAATGCCATTCTTCTGTA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM\_009231
- Insert Size:** 3960 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).
- 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\\_009231.2](#), [NP\\_033257.2](#)

**RefSeq Size:** 8919 bp

**RefSeq ORF:** 3960 bp

**Locus ID:** 20662

**UniProt ID:** [Q62245](#)

**Cytogenetics:** 17 50.67 cM

**Gene Summary:** Promotes the exchange of Ras-bound GDP by GTP. Probably by promoting Ras activation, regulates phosphorylation of MAP kinase MAPK3 in response to EGF (By similarity). Catalytic component of a trimeric complex that participates in transduction of signals from Ras to Rac by promoting the Rac-specific guanine nucleotide exchange factor (GEF) activity (PubMed:10499589, PubMed:11524436).[UniProtKB/Swiss-Prot Function]