

Product datasheet for **MG219553**

Sos1 (NM_009231) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sos1 (NM_009231) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Sos1
Synonyms:	4430401P03Rik; 9630010N06; A1449023
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG219553 representing NM_009231 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCAGGCGCAGCAGCTGCCTTACGAGTTTTTCAGCGAGGAGAACGCGCCCAAGTGGCGGGGGCTGCTGG
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CTTCTCAACTTATCCCCAACTCCCTCCAAAACCTTACAAAAGGGAGCACACACCCATCCATGCATAG
AGATGGACCACCACTGCTGGAGAATGCCATTCTTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG219553 representing NM_009231
 Red=Cloning site Green=Tags(s)

MQAQQLPYEFFSEENAPKWRGLLVPALKKVQGVHPTLESNDALQYVEELILQLLNMLCQAQPRSASDV
 EERVQKSFPHPIDKWAIDAQSAIEKRKRNRNPLSLPAERIHLLREVLGYKIDHQVSVYIVAVLEYISAD
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 VSSISLSKGTDEVPVPPVPPRRRPEAPAESPSKIMSKHLDSPPAIPRQPTSKAYSPPRYSISDRTSI
 SDPPESPLLPPREPVRTPDVFSSSPLHLQPPPLGKSDHGNAFFPNSPSPFTPPPPQTPSPHGTRRRHLP
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TRTRPLE - GFP Tag - V

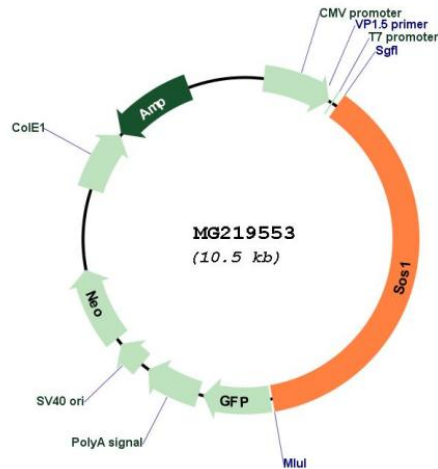
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_009231

ORF Size: 3957 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_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]