

Product datasheet for **RG226908**

SAE1 (NM_001145713) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: SAE1 (NM_001145713) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: SAE1
Synonyms: AOS1; HSPC140; SUA1; UBLE1A
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG226908 representing NM_001145713
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGGTGGAGAAGGAGGAGGCTGGCGGGCATTAGCGAGGAGGAGGGCGGCACAGTATGACCGGCAGATCC
GCCTGTGGGGACTGGAGGCCAGAAACGGCTGCGGGCCTCTCGGGTGCTTCTTGTGCGCTTGAAAGGACT
TGGGGCTGAAATTGCCAAGAATCTCATCTTGGCAGGAGTAAAGGACTGACCATGCTGGATCACGAACAG
GTAAGTCCAGAAGATCCCGGAGCTCAGTCTTGATTCGACTGGTCTGTTGGCCGAAATAGGGCTGAAG
CCTCTTTGGAGCGAGCTCAGAATCTCAACCCATGGTGGATGTGAAGGTGGACACTGAGGATATAGAGAA
GAAACCAGAGTCAATTTCACTCAATTCGATGCTGTGTCTGACTTGCTGCTCCAGGGATGTCATAGTT
AAAGTTGACCAGATCTGTACAAAAATAGCATCAAGTTCTTTACAGGAGATGTTTTGGCTACCATGGAT
ACACATTTGCCAATCTAGGAGAGCATGAGTTTGTAGAGGAGAAAATAAGTTGCCAAAGTTAGCCAAGG
AGTAGAAGATGGGCCGACCAAGAGAGCAAACTTGATTCTTCTGAGACAACGATGGTCAAAAAGAAAG
GTGGTCTTCTGCCCTGTTAAAGAAGCCCTGGAGGTGGACTGGAGCAGTGAGAAAGCAAAGGCTGCTCTGA
AGCGCACGACCTCCGACTACTTTCTCCTCAAGGCCCTGTCTCAGCGGGACCCCTCTCACAACACTTCT
TCTTCTCGATGGCATGAAGGGGAATGGGATTGTGGAGTGCCTTGGCCCCAAGTGAATCAAGATTTGGC
AGCCCCAGAGATGCCAACTGCAGCATGCCACCTGTATTCCCTGTCCCTTCTTCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG226908 representing NM_001145713
 Red=Cloning site Green=Tags(s)

MVEKEEAGGGISEEEAAQYDRQIRLWGLEAQKRLRASRVLLVGLKGLGAEIAKNLILAGVKGLTMLDHEQ
 VTPEDPGAQFLIRTGSVGRNRAEASLERAQNLNPMVDVKVDTEIEKKPESFFTQFQDAVCLTCCSRDVIV
 KVDQICHKNSIKFFFTGDVFGYHGYYTFANLGEHEFVEEKTAKVAVSQGVEDGPDTKRAKLDSETTMVKKK
 VVFCPVKEALEVDWSSEKAKAALKRRTSDYFLLQGPVSAQSSQQLLLLRLWHEGEWDCGVPWPQVNSRFG
 SPRDANCSMPTCIPCPLPS

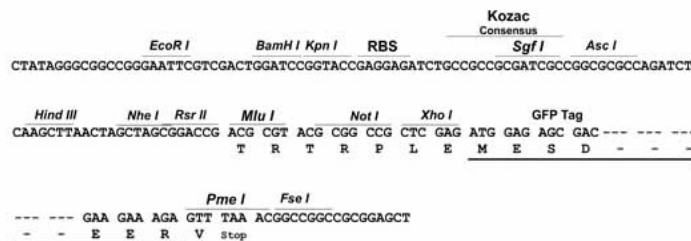
TRTRPLE - GFP Tag - V

Restriction Sites:

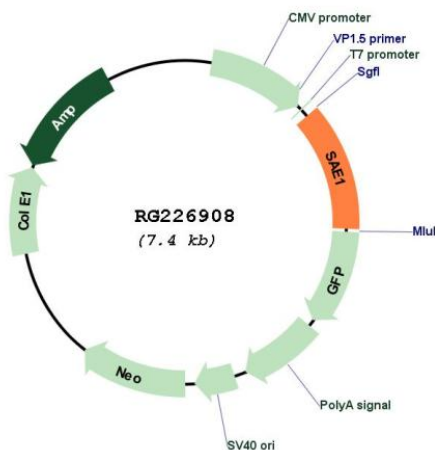
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_001145713

ORF Size: 897 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:	<ol style="list-style-type: none">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_001145713.2
RefSeq Size:	2323 bp
RefSeq ORF:	900 bp
Locus ID:	10055
UniProt ID:	Q9UBE0
Cytogenetics:	19q13.32
Protein Pathways:	Ubiquitin mediated proteolysis
Gene Summary:	Posttranslational modification of proteins by the addition of the small protein SUMO (see SUMO1; MIM 601912), or sumoylation, regulates protein structure and intracellular localization. SAE1 and UBA2 (MIM 613295) form a heterodimer that functions as a SUMO-activating enzyme for the sumoylation of proteins (Okuma et al., 1999 [PubMed 9920803]). [supplied by OMIM, Mar 2010]