

Product datasheet for **SC326551**

SAE1 (NM_001145713) Human Untagged Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | SAE1 (NM_001145713) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | SAE1 |
| Synonyms: | AOS1; HSPC140; SUA1; UBLE1A |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| Fully Sequenced ORF: | >SC326551 representing NM_001145713. Blue=Insert sequence Red=Cloning site Green=Tag(s) |

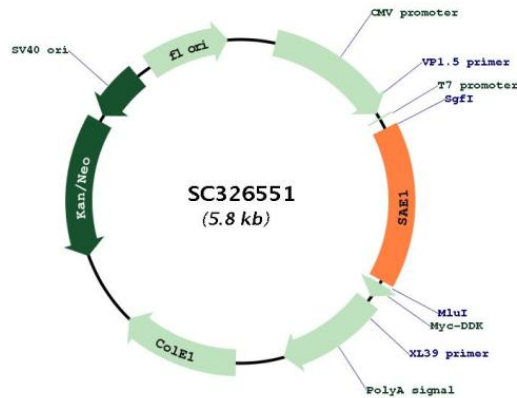
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GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGTGGAGAAGGAGGAGGCTGGCGGGCATTAGCGAGGAGGAGGCGGCACAGTATGACCGGCAGATC
CGCCTGTGGGACTGGAGGCCAGAAACGGCTGCCGGCCTCTCGGGTCTTCTTGTGGCTTAAAGGA
CTTGGGGCTGAAATTGCCAAGAATCTCATCTTGGCAGGAGTAAAGGACTGACCATGCTGGATCACGAA
CAGGTAACCTCAGAAGATCCCGGAGCTCAGTCTTGATTCGACTGGGTCTGTTGGCCGAAATAGGGCT
GAAGCCTCTTTGGAGCGAGCTCAGAATCTCAACCCATGGTGGATGTGAAGGTGGACACTGAGGATATA
GAGAAGAAACCAGAGTCATTTTCACTCAATTCGATGCTGTGTCTGACTTGCTGCTCCAGGGATGTC
ATAGTTAAAGTTGACCAGATCTGTACAAAAATAGCATCAAGTCTTTACAGGAGATGTTTTGGCTAC
CATGGATACACATTTGCCAATCTAGGAGAGCATGAGTTTGTAGAGGAGAAAATAAAGTTGCCAAAGTT
AGCCAAGGAGTAGAAGATGGGCCCGACACCAAGAGAGCAAACTTGATTCTTCTGAGACAACGATGGTC
AAAAAGAAGGTGGTCTTCTGCCCTGTTAAAGAAGCCCTGGAGGTGGACTGGAGCAGTGAGAAAGCAAAG
GCTGCTCTGAAGCGCACGACCTCCGACTACTTTCTCCTCAAGGCCCTGTCTCAGCGGGACCCTCCTCA
CAACAACCTCTTCTTCTCGATGGCATGAAGGGGAATGGGATTGTGGAGTGCCTTGGCCCAAGTGAACT
CAAGATTTGGCAGCCCCAGAGATGCCAACTGCAGCATGCCACCTGTATTCCCTGTCCCCTTCTTCA
TGA
ACGCGTACGCGGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites: SgfI-MluI



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Plasmid Map:



ACCN: NM_001145713

Insert Size: 900 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).

OTI Annotation: 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.

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_001145713.1](#)

RefSeq Size: 2323 bp

RefSeq ORF: 900 bp

| | |
|--------------------------|---|
| Locus ID: | 10055 |
| UniProt ID: | Q9UBE0 |
| Cytogenetics: | 19q13.32 |
| Protein Pathways: | Ubiquitin mediated proteolysis |
| MW: | 33.1 kDa |
| Gene Summary: | <p>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]</p> <p>Transcript Variant: This variant (2) lacks two alternate exons, compared to variant 1, which causes a frameshift. The resulting protein (isoform b) has a distinct C-terminus and is shorter than isoform a.</p> |