

## Product datasheet for **SC300047**

### Serum Amyloid A (SAA1) (NM\_000331) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Serum Amyloid A (SAA1) (NM_000331) Human Untagged Clone
Tag:	Tag Free
Symbol:	Serum Amyloid A
Synonyms:	PIG4; SAA; SAA2; TP5314
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF sequence for NM_000331 edited

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GGGCCGCGCGAATTCGGCCATTACGGCCGGGAGGGACCCGAGCCTCAAGCTACAGC  
ACAGACTCAAGCACCATGAAGCTTCTCACGGGCCTGGTTTTCTGCTCCTTGGTCCTGGGT  
GTCAGCAGCCGAAGCTTCTTTTCGTTCCCTTGGCGAGGCTTTTGATGGGGCTCGGGACATG  
TGGAGAGCCTACTCTGACATGAGAGAAGCCAATTACATCGGCTCAGACAAATACTTCCAT  
GCTCGGGGAACTATGATGCTGCCAAAAGGGGACCTGGGGTGCCTGGGCTGCAGAAGTG  
ATCAGCGATGCCAGAGAGAATATCCAGAGATTCTTTGGCCATGGTGCGGAGGACTCACTG  
GCCGATCAGGCTGCCAATGAATGGGGCAGGAGTGGCAAAGACCCAATCACTTCCGACCT  
GCTGGCCTGCCTGAGAAATACTGAGCTTCTCTTCACTCTGCTCTCAGGAGATCTGGCTG  
TGAGGCCCTCAGGGCAGGATACAAAGCGGGGAGAGGGTACACAATGGGTATCTAATAAA  
TACTTAAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACATGTCGGCCGCC
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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for NM_000331 unedited NGAGGTCGAATCTTTGTACTACGAACTCACTATAGGGNCCGGCCGNAATTCGGCCATT ACGGCCGGGGAGGGACCCGCAGCCTCAACTACAGCACAGCACAAGCACCATGAAGCTTCT CACGGGCTGGTTTTCTGCTCCTTGGTCTGGGTGTCAGCAGCCGAAGCTCTTTTCGTT CCTTGGCGAGGCTTTTGTGGGGCTCGGGACATGTGGAGAGCCTACTCTGACATGAGAGA AGCCAATTACATCGGCTCAGACAAATACTTCCATGCTCGGGGAACTATGATGCTGCCAA AAGGGGACCTGGGGTGCCTGGGCTGCAGAAGTGATCAGCGATGCCAGAGAGAATATCCA GAGATTCTTTGGCCATGGTGCGGAGGACTCACTGGCCGATCAGGCTGCCAATGAATGGGG CAGGAGTGGCAAAGACCCCAATCACTTCCGACCTGCTGGCCTGCGTGAAGAACTAGAGC TTCCTCTCACTCTGCTCTCAGGAGATCTGGCTGTGAGGCCCTCAGGGCAGGGATACAAA GCGGGGAGAGGGTACACAATGGGTATCTAATAAACTTAANAAAAAAAAAAAAAAAAANAA AAAAAAAAAACATGTTGCGCCGCTCGGCCCTCGACTCTAGATTGCGGNCCGCGGTACATG CTTGTTTCTGAACAGATCCCGGTGGCATCCCTGTGACCCCTCCCAGTGCCTCCTCTG GCCCTGGAAGTTGCCACTCCAGTGCCACCAGCCTTGCCCTATAAAATAAAGTTGCATC ATTTTGTCTGACTAGGTGTCCTTCTATATTTGGGGTGGAGGGGGTGGTTTTTGAAC AAGGGGCCAGTTGGGAAAAACACCCCTGTAGGCCCTGCGGGTCTATTGGGAACCAACCT
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_000331
<b>OTI Disclaimer:</b>	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>	The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.
<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>	<a href="#">NM_000331.2</a> , <a href="#">NP_000322.2</a>
<b>RefSeq Size:</b>	722 bp
<b>RefSeq ORF:</b>	369 bp
<b>Locus ID:</b>	6288
<b>UniProt ID:</b>	<a href="#">P02735</a>
<b>Cytogenetics:</b>	11p15.1

**Gene Summary:**

This gene encodes a member of the serum amyloid A family of apolipoproteins. The encoded preproprotein is proteolytically processed to generate the mature protein. This protein is a major acute phase protein that is highly expressed in response to inflammation and tissue injury. This protein also plays an important role in HDL metabolism and cholesterol homeostasis. High levels of this protein are associated with chronic inflammatory diseases including atherosclerosis, rheumatoid arthritis, Alzheimer's disease and Crohn's disease. This protein may also be a potential biomarker for certain tumors. Finally, antimicrobial activity against *S. aureus* and *E. coli* resides in the N-terminal portion of the mature protein. Alternate splicing results in multiple transcript variants that encode the same protein. A pseudogene of this gene is found on chromosome 11. [provided by RefSeq, Jul 2020]

Transcript Variant: This variant (1) represents the longest transcript. Variants 1, 2 and 3 encode the same protein.