

## Product datasheet for **RG210664**

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

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Serum Amyloid A (SAA1) (NM\_000331) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Serum Amyloid A  
**Synonyms:** PIG4; SAA; SAA2; TP5314  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG210664 representing NM\_000331  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGAAGCTTCTCACGGGCTGGTTTTCTGCTCCTTGGTCTGGGTGTCAGCAGCCGAAGCTTCTTTTCGT  
 TCCTTGGCGAGGCTTTTGGATGGGCTCGGGACATGTGGAGAGCCTACTCTGACATGAGAGAAGCCAATTA  
 CATCGGCTCAGACAAATACTTCCATGCTCGGGGAACTATGATGCTGCCAAAAGGGACCTGGGGGTGTC  
 TGGGCTGCAGAAGCGATCAGCGATGCCAGAGAGAATATCCAGAGATTCTTTGGCCATGGTCCGGAGGACT  
 CGCTGGCTGATCAGGCTGCCAATGAATGGGGCAGGAGTGGCAAAGACCCCAATCACTTCCGACCTGCTGG  
 CCTGCCTGAGAAATAC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG210664 representing NM\_000331  
 Red=Cloning site Green=Tags(s)  
 MKLLTGLVFCSLVLGVSSRSFFSFLGEAFDGDARMWRAYSMDREANYIGSDKYFHARGNYDAAKRGPGGV  
 WAAEAIISDARENIQRFFGHGAEDSLADQAANEWGRSGKDPNHFRPAGLPEKY

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI



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**Cloning Scheme:**


**ACCN:** NM\_000331

**ORF Size:** 366 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\\_000331.1](#)

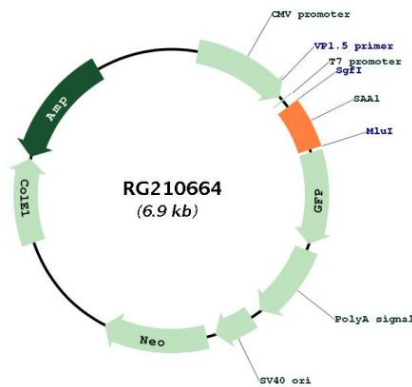
**RefSeq Size:** 722 bp

**RefSeq ORF:** 369 bp

**Locus ID:** 6288  
**UniProt ID:** [P02735](#)  
**Cytogenetics:** 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]

### Product images:



Circular map for RG210664