

### **Product datasheet for RG229554**

#### OriGene Technologies, Inc.

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## Serum Amyloid A (SAA1) (NM\_001178006) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** Serum Amyloid A (SAA1) (NM\_001178006) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: Serum Amyloid A

Synonyms: PIG4; SAA; SAA2; TP53I4

Mammalian Cell

Selection:

Neomycin

**Vector:** pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG229554 representing NM\_001178006 Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGAAGCTTCTCACGGGCCTGGTTTTCTGCTCCTTGGTCCTGGGTGTCAGCAGCCGAAGCTTCTTTTCGT
TCCTTGGCGAGGCTTTTGATGGGGCTCGGGACATGTGGAGAGCCTACTCTGACATGAGAGAAGCCAATTA
CATCGGCTCAGACAAATACTTCCATGCTCGGGGGAACTATGATGCTGCCAAAAGGGGACCTGGGGGTGCC
TGGGCTGCAGAAGTGATCAGCGATGCCAGAGAGAATATCCAGAGATTCTTTGGCCATGGTGCGGAGGACT
CGCTGGCTGATCAGGCTGCCAATGAATGAGGGCAGGAGTGGCAAAGACCCCCAATCACTTCCGACCTGCTGG

CCTGCCTGAGAAATAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG229554 representing NM\_001178006

Red=Cloning site Green=Tags(s)

MKLLTGLVFCSLVLGVSSRSFFSFLGEAFDGARDMWRAYSDMREANYIGSDKYFHARGNYDAAKRGPGGA

WAAEVISDARENIQRFFGHGAEDSLADQAANEWGRSGKDPNHFRPAGLPEKY

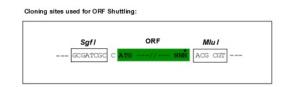
TRTRPLE - GFP Tag - V

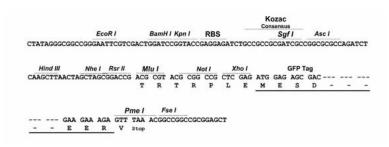
**Restriction Sites:** Sgfl-Mlul





#### **Cloning Scheme:**





**ACCN:** NM\_001178006

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:** <u>NM 001178006.2</u>

RefSeq Size: 592 bp RefSeq ORF: 369 bp



 Locus ID:
 6288

 UniProt ID:
 P02735

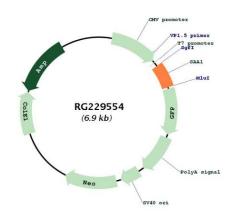
 Cytogenetics:
 11p15.1

**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 RG229554