

Product datasheet for **RC202738**

Serum Amyloid A (SAA1) (NM_199161) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Serum Amyloid A (SAA1) (NM_199161) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: Serum Amyloid A
Synonyms: PIG4; SAA; SAA2; TP53I4
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC202738 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAAGCTTCTCACGGGCTGGTTTTCTGCTCCTTGGTCTGGGTGTCAGCAGCCGAAGCTTCTTTTCGT
 TCCTTGGCGAGGCTTTTGGTGGGCTCGGGACATGTGGAGAGCCTACTCTGACATGAGAGAAGCCAATTA
 CATCGGCTCAGACAAATACTTCCATGCTCGGGGAACTATGATGCTGCCAAAAGGGGACCTGGGGGTGTC
 TGGGCTGCAGAAGCGATCAGCGATGCCAGAGAGAATATCCAGAGATTCTTTGGCCATGGTGGGAGGACT
 CACTGGCCGATCAGGCTGCCGATGAATGGGGCAGGAGTGGCAAAGACCCCAATCACTTCCGACCTGCTGG
 CCTGCCTGAGAAATAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC202738 protein sequence
 Red=Cloning site Green=Tags(s)
 MKLLTGLVFCSLVLGVSSRSFFSFLGEAFDGDARMWRAYSMDREANYIGSDKYFHARGNYDAAKRGPGGV
 WAAEAIISDARENIQRFFGHGAEDSLADQAADEWGRSGKDPNHFRPAGLPEKY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6145_g06.zip

Restriction Sites: Sgfl-Mlul



[View online »](#)

Cloning Scheme:


ACCN: NM_199161

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_199161.5](#)

RefSeq Size: 531 bp

RefSeq ORF: 369 bp

Locus ID: 6288

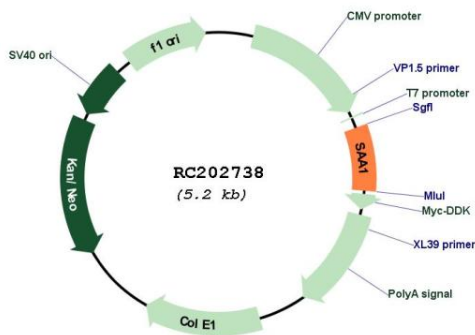
UniProt ID: [P02735](#)

Cytogenetics: 11p15.1

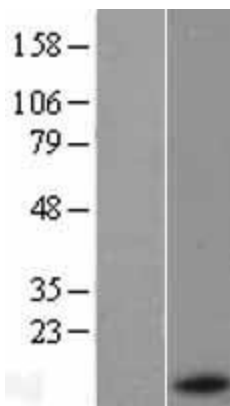
MW: 13.5 kDa

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]

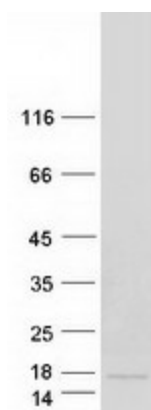
Product images:



Circular map for RC202738



Western blot validation of overexpression lysate (Cat# [LY403693]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202738 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SAA1 protein (Cat# [TP302738]). The protein was produced from HEK293T cells transfected with SAA1 cDNA clone (Cat# RC202738) using MegaTran 2.0 (Cat# [TT210002]).