

## Apo-SAA active protein

Human Apo-SAA

|                              |                       |                            |
|------------------------------|-----------------------|----------------------------|
| CATALOG #<br><b>AAA14951</b> | HOST<br><b>E Coli</b> | REACTIVITY<br><b>Human</b> |
|------------------------------|-----------------------|----------------------------|

### PRODUCT SYNONYMS

Apo-SAA; Human Apo-SAA; Recombinant Human Apo-SAA; Apo-SAA active protein

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                                                                              |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                    | E Coli                                                                                                                                                                                                                                                                                                                                       |
| Reactivity              | Human                                                                                                                                                                                                                                                                                                                                        |
| Purity/Purification     | > 98% by SDS-PAGE and HPLC analyses                                                                                                                                                                                                                                                                                                          |
| Form/Format             | Lyophilized (5mM Tris, pH7.8)                                                                                                                                                                                                                                                                                                                |
| Sequence                | MRSFFSFLGE AFDGARDMWR AYSDMREANY IGSDKYFHAR GNYDAAKGRP GGVWAAEAI S NAREN IQRFF<br>GRGAEDSLAD QAANEWGRSG KDPNHFRPAG LPEKY                                                                                                                                                                                                                     |
| Sequence Length         | 122                                                                                                                                                                                                                                                                                                                                          |
| Endotoxin Level         | < 0.1 ng /ug of protein (<1EU/ug).                                                                                                                                                                                                                                                                                                           |
| Reconstitution          | Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C |
| Length                  | 104                                                                                                                                                                                                                                                                                                                                          |
| Biological Activity     | Tested by its ability to down-regulate lipid biosynthesis in aortic smooth muscle cells. The effective concentration was found to be 4 uM.                                                                                                                                                                                                   |
| Preparation and Storage | The lyophilized protein is stable at room temperature for 1 month and at 4°C for 6 months. Reconstituted working aliquots are stable for 1 week at 2°C to 8°C and for 6 months at -20°C to -80°C. Avoid repeated freeze and thaw cycles.                                                                                                     |

### ADDITIONAL INFORMATION

|                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for Apo-SAA active protein | Human Apo-SAA is a 104 amino acid polypeptide that circulates primarily in association with high-density lipoproteins (HDL). The level of Apo-SAA, normally 1-5 ug/ml in plasma, increases 500-1000 fold within 24 hours of an inflammatory stimulus and, under these conditions, is the most abundant HDL Apolipoprotein. The human SAA gene codes for a 122 amino acid polypeptide, which contains an 18 amino acid N-terminal signal sequence. Recombinant Apo-SAA is a consensus SAA molecule corresponding to human Apo-SAA1alpha except for the presence of an N-terminal methionine and substitution of asparagine for aspartic acid at position 60 and arginine for histidine at position 71(the last two substituted residues are present in apo-SAA2beta). The calculated molecular weight of recombinant human Apo-SAA is 11.4 kDa. |
| Product Categories/Family for Apo-SAA active protein   | <a href="#">Cytokines &amp; Growth Factors</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

### NCBI AND UNIPROT INFORMATION

|             |                          |
|-------------|--------------------------|
| NCBI GI #   | <a href="#">40316912</a> |
| NCBI GeneID | <a href="#">6288</a>     |

|                                  |                                                                                                                                                                                                                                                                                                           |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI Accession #                 | <a href="#">NP_000322.2</a>                                                                                                                                                                                                                                                                               |
| NCBI GenBank Nucleotide #        | <a href="#">NM_000331.4</a>                                                                                                                                                                                                                                                                               |
| UniProt Accession #              | <a href="#">P0DJ18</a> ; <a href="#">P02735</a> ; <a href="#">P02736</a> ; <a href="#">P02737</a> ; <a href="#">Q16730</a> ; <a href="#">Q16834</a> ; <a href="#">Q16835</a> ; <a href="#">Q16879</a> ; <a href="#">Q3KRB3</a> ; <a href="#">Q6FG67</a> ; <a href="#">Q96QN0</a> ; <a href="#">Q9UCK9</a> |
| Molecular Weight                 | 11.4 kDa                                                                                                                                                                                                                                                                                                  |
| NCBI Official Full Name          | serum amyloid A-1 protein preproprotein                                                                                                                                                                                                                                                                   |
| NCBI Official Synonym Full Names | serum amyloid A1                                                                                                                                                                                                                                                                                          |
| NCBI Official Symbol             | SAA1                                                                                                                                                                                                                                                                                                      |
| NCBI Official Synonym Symbols    | SAA; PIG4; SAA2; TP53I4                                                                                                                                                                                                                                                                                   |
| NCBI Protein Information         | serum amyloid A-1 protein; serum amyloid A protein; tumor protein p53 inducible protein 4                                                                                                                                                                                                                 |
| UniProt Protein Name             | Serum amyloid A-1 protein                                                                                                                                                                                                                                                                                 |
| UniProt Gene Name                | <b>SAA1</b>                                                                                                                                                                                                                                                                                               |
| UniProt Synonym Gene Names       | SAA                                                                                                                                                                                                                                                                                                       |
| UniProt Entry Name               | SAA1_HUMAN                                                                                                                                                                                                                                                                                                |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | [contact@aaabiotech.com](mailto:contact@aaabiotech.com)  
Online datasheet: <https://stage.aaabiotech.com/e-coli-human-active-protein/apo-saa/14951>