

# SAA (hBA-104): sc-4870

## BACKGROUND

The serum amyloid A (SAA) family of proteins is encoded by multiple genes, which display allelic variation and a high degree of homology in mammals. The four members of the SAA gene family are clustered on human chromosome 11p15.1. Three SAA genes are differentially expressed and encode small apolipoproteins. SAA1 and SAA2 encode the acute phase SAAs (A-SAAs), and SAA4 encodes the constitutively expressed SAA (C-SAA). A fourth locus, SAA3, is a pseudogene that contains two C/EBP-binding sites and a third site which interacts with SAA3 enhancer factor. Human SAA proteins are a group of 12-14 kDa apolipoproteins found predominantly in the high-density lipoprotein (HDL) fraction of plasma. SAA is a major acute-phase protein and precursor to amyloid A protein, which is the major constituent of the fibril deposits of reactive amyloidosis. SAA is secreted in large amounts by the liver during microbial infections or inflammatory diseases.

## REFERENCES

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## SOURCE

SAA (hBA-104) is produced in *E. coli* as 11.7 kDa biologically active protein corresponding to 104 amino acids of SAA of human origin.

## PRODUCT

SAA (hBA-104) is purified from bacterial lysates (>98%); supplied as 50 µg purified protein.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## BIOLOGICAL ACTIVITY

SAA (hBA-104) exerts its biological activity, for most *in vitro* applications, in the concentration range of 10-50 µg/ml.

## RECONSTITUTION

In order to avoid freeze/thaw damaging of the active protein, dilute protein when first used to desired working concentration. Either a sterile filtered standard buffer (such as 50mM TRIS or 1X PBS) or water can be used for the dilution. Store any thawed aliquot in refrigeration at 2° C to 8° C for up to four weeks, and any frozen aliquot at -20° C to -80° C for up to one year. It is recommended that frozen aliquots be given an amount of standard cryopreservative (such as Ethylene Glycol or Glycerol 5-20% v/v), and refrigerated samples be given an amount of carrier protein (such as heat inactivated FBS or BSA to 0.1% v/v) or non-ionic detergent (such as Triton X-100 or Tween 20 to 0.005% v/v), to aid stability during storage.

## STORAGE

Store desiccated at -20° C; stable for one year from the date of shipment.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.