

SAP (P-16): sc-18310

BACKGROUND

Serum amyloid P (SAP) is a glycoprotein belonging to the pentraxin family of proteins, which has a characteristic pentameric organization and calcium dependent ligand binding. Secreted by liver epithelial cells, SAP is found in serum and urine. Although the function of SAP has not been clearly established, it has been shown to interact with DNA and histones and is thought to play a role in scavenging nuclear material released from damaged circulating cells. Also designated PTX2, SAP is a precursor of the protein amyloid P component (AP), which is universally associated with the amyloid deposits in all forms of amyloidoses, including Alzheimer's disease. SAP is a decamer of 10 identical, noncovalently linked subunits, each of which may be post-translationally modified by glycosylation.

REFERENCES

1. Mantzouranis, E.C., et al. 1985. Human serum amyloid P component. cDNA isolation, complete sequence of pre-serum amyloid P component, and localization of the gene to chromosome 1. *J. Biol. Chem.* 260: 7752-7756.
2. Floyd-Smith, G., et al. 1986. The human C-reactive protein gene (CRP) and serum amyloid P component gene (APCS) are located on the proximal long arm of chromosome 1. *Immunogenetics* 24: 171-176.

CHROMOSOMAL LOCATION

Genetic locus: APCS (human) mapping to 1q23.2.

SOURCE

SAP (P-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of SAP of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-18310 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SAP (P-16) is recommended for detection of SAP of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SAP siRNA (h): sc-42972, SAP shRNA Plasmid (h): sc-42972-SH and SAP shRNA (h) Lentiviral Particles: sc-42972-V.

Molecular Weight of SAP oligomeric protein: 200 kDa.

Molecular Weight of SAP noncovalently bound: 26 kDa.

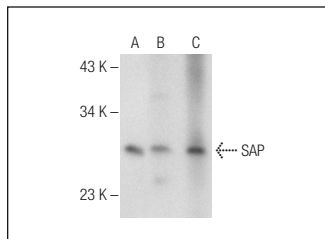
Molecular Weight of SAP glycosylated subunits: 30 kDa.

Positive Controls: human plasma lysate: sc-364374, human breast extract: sc-363753 or human kidney extract: sc-363764.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



SAP (P-16): sc-18310. Western blot analysis of SAP in human plasma (A) and SAP expression in human breast (B) and human kidney (C) tissue extracts.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **SAP (C-11): sc-393948** or **SAP (6E6): sc-69796**, our highly recommended monoclonal alternatives to SAP (P-16).