

Product Specification Sheet

**Human Serum Amyloid P component or SAP Antibodies**

Cat. # SAP12-S	Rabbit Anti-Human SAP antiserum # 2	<b>SIZE:</b> 100 ul
Cat. # SAP13-M	Mouse Monoclonal Anti-Human SAP IgG # 1, aff pure	<b>SIZE:</b> 100 ug
Cat. # SAP11-C	Purified Human SAP protein control for WB	<b>SIZE:</b> 100 ul

**Serum amyloid P component or SAP or APCS, or PTX2** (mature chain 204 aa, chromosome 1q21-23) with which CRP has about 59% homology, is situated in the same area of chromosome 1. SAP is universally present in amyloid deposits 9senile plaque and neurofibrillary tangles) in Alzheimer's patients. SAP levels in CSF can be useful for assessing cognitive impairment in AD patients. However, SAP appeared not to be required for A-beta deposition since no endogenous SAP immunoreactivity was found in mice overexpressing APP.

In mice with a targeted deletion of the SAP gene, induction of reactive amyloidosis was retarded, demonstrating the participation of SAP in pathogenesis of amyloidosis in vivo and confirming that inhibition of SAP binding to amyloid fibrils is an attractive therapeutic target. SAP knock out mice develop antinuclear autoimmunity and glomerulonephritis. However the exact role of SAP in SLE is not clear. SAP also neutralizes LPS and it is potentially useful in defense against serious gram-negative sepsis.

**Source of Antigen and Antibodies**

**Cat#SAP12-S**

<b>Antigen</b>	Human SAP was purified (>99%) from acute phase serum
<b>Ab Host/type</b>	Rabbit, Polyclonal antiserum # <b>SAP12-S</b>
<b>2-Ab</b>	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
<b>-ve control IgG</b>	Cat # 20009-1, Rabbit (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as -ve control

**Cat#SAP13-MS**

<b>Antigen</b>	Human SAP was purified (>99%) from acute phase serum
<b>Ab Host/type</b>	Balb/c <b>mouse</b> . Splenocytes were fused with Sp2/0 myeloma cells. Resulting clone (designated Sap12, isotype IgG1), selected for reactivity with SAP, was expanded into mice as <b>ascites</b> . Antibody has been purified by Protein A/G column chromatography.
<b>2-Ab</b>	Goat Anti-mouse IgG-HRP conjugate Cat # 40320 (AP, biotin, FITC conjugates also available)
<b>-ve control IgG</b>	Cat # 20008-1, Mouse (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as -ve control

**Cat# SAP11-C**

Human SAP was purified (>99%) from acute phase serum. All human source materials have tested negative for HIV 1, HIV 2, HIV Ag, HBsAg and HCV. No test guarantees a product to be non-infectious. Therefore, all material derived from human fluids or tissues should be considered as potentially infectious. Purified human SAP in native form is approx 235 kDa (monomer approx 25 kda).

Purified Human SAP protein for Western blot +ve control (**Cat # SAP11-C**) is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of **SAP11-C** for good visibility with antibody Cat # **SAP12-S**. Store at -20oC in suitable size aliquots. SDS may crystallize in cold conditions. It should redissolve by warming before taking it from the stock. It should be heated once prior to loading on gels. If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the **SAP11-C** solution prior to heating and loading on gels. This preparation is not biologically active. It is not suitable for ELISA or other applications where native protein is required. Do not freeze, thaw, or heat repeatedly

**Suggested antibody Dilutions:** 1:500-1:5K for Western; 1:5K-1:20K for ELISA. Further optimization may be needed under actual experimental conditions.

**Immunohistochemistry:** suggested dilution 1:100-1:500. Staining of mouse tissues identifies only those structures known to contain SAP.

**Species Specificity**

SAP12-S and SAP13-M antibodies are specific for human SAP with no crossreactivity with CRP or other pentraxins. It has minimal crossreactivity with mouse SAP. Antibody crossreactivity with other species not tested. We recommend using anti-mouse SAP (cat # SAP11-S) for detecting mouse SAP.

**Shipping:** 4oC for solutions and room temp for powder.

**Stability:** 6-12 months from the date of shipping.

**General References:** Mortensen RF (1985) *Immunogenetics* 22: 367-375; Whitehead AS et al (1988) *Immunogenetics* 28: 388-390; Mantzouranis EC et al (1985) *J. Biol. Chem.* 260: 7752-7756; Botto M et al (1997) *Nature Med.* 3: 855-859; pepys MB et al (1979) *Nature* 278, 259;

*\*All product are for In vitro research use only.*

**Related material available from ADI**

Rat and Dog CRP antibodies and reference controls, Human and Rat CRP ELISA Kits; Mouse and Human SAP antibodies and purified proteins.

SAP12-S-13-M-11-C

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