**BACKGROUND**

Pentraxins, which include C-reactive protein (CRP) and serum amyloid P component (SAP), are prototypic acute phase proteins. CRP and SAP are produced by liver epithelial cells and are characterized by a cyclic pentameric structure and calcium-dependent ligand binding. IL-6 is the major inducer of human CRP gene, and IL-1 and steroids can enhance this induction. Testosterone is required for the expression of CRP transgene in vivo, whereas testosterone is not required for expression of the SAP gene. During the acute phase response, cytokine C5a acts with IL-6 and/or IL-1β to promote up-regulation of the CRP and SAP genes. Both Stat3 and C/EBP are involved in mouse SAP gene expression, but only Stat3 is involved in mouse CRP gene expression. SAP binds to a variety of molecules, including autoantigens and chromatin. Both CRP and SAP also bind to FcγR and opsonize particles for phagocytosis by human polymorphonuclear leukocytes. Opsonization of zymosan by CRP is mediated through FcγRI, while FcγRII and FcγRIII are receptors for SAP. Therefore, CRP and SAP play critical roles in the host defense system.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: CRP (human) mapping to 1q23.2; Crp (mouse) mapping to 1 H3.

**SOURCE**

CRP (26D7) is a mouse monoclonal antibody raised against recombinant CRP of human origin.

**PRODUCT**

Each vial contains 100 µg IgG, in 1.0 ml of PBS with < 0.1% sodium azide, 0.1% gelatin, 1% glycerol and < 0.1% stabilizer protein.

**APPLICATIONS**

CRP (26D7) is recommended for detection of CRP of mouse, rat and human origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:100-1:5000), immunoprecipitation [1-2 µl per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution to be determined by researcher, dilution range 1:30-1:5000).

Suitable for use as control antibody for CRP siRNA (h): sc-40815, CRP siRNA (m): sc-40816, CRP shRNA Plasmid (h): sc-40815-SH, CRP shRNA Plasmid (m): sc-40816-SH, CRP shRNA (h) Lentiviral Particles: sc-40815-V and CRP shRNA (m) Lentiviral Particles: sc-40816-V.

Molecular Weight of CRP monomer: 24-30 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

**DATA**

**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 for detailed protocols and support products.