

Product datasheet for **AP31522SU-N**

Complement C4A (C4A) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ID, IP
Recommended Dilution:	Can be used in precipitating techniques as immunoelectrophoresis and single or double radial immunodiffusion to identify the presence of C4 containing complexes in human plasma or other body fluids or to determine its concentration. The presence of non precipitating antibodies has not been assayed. This does not exclude the use of the antiserum in more sensitive nonprecipitating antibody-binding techniques if proper controls are included.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	C4 and C2 represent substrates for activated C1. Both components are present in serum in an inert form. C4 is composed of 3 polypeptide chains of three different types, , , . One of the chains is cleaved by the action of activated C1, resulting in activation of C4 exposing a binding site for the next component in the sequence, C2. C4 has a molecular weight of 205.000 and is present in plasma in an average concentration of 600 µg/ml. The activation of C4 yields two peptide fragments: C4a (MW 8,000) and C4b (MW 198,000). This process shows a considerable degree of similarity to the activation of the components C3 and C5. The C4 is isolated as a homogenous protein for use in antiserum production. Freund's complete adjuvant is used in the first step of the immunization procedure.
Specificity:	The reactivity of the antiserum is restricted to C4. In immunoelectrophoresis and radial immunodiffusion (Ouchterlony), using various antiserum concentrations against fresh normal human plasma a single precipitin line is obtained which shows a reaction of identity with the precipitin line obtained with purified C4 protein. Activated C4b may also react with the antiserum. No reaction is obtained with any other plasma protein component or serum. <u>Cross-reactivity:</u> Inter-species cross-reactivity is a normal feature of antibodies to serum proteins, since homologous proteins of different species frequently share antigenic determinants. The degree of cross-reactivity is also dependent on the concentrations of the reactants and the sensitivity of the assay arrangement. This antiserum has been tested for cross-reactivity in double radial immunodiffusion with bovine serum and found negative.



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Formulation:	No preservative added. - No foreign proteins added. State: Serum State: Delipidated, heat inactivated, lyophilized, stable whole antiserum
Reconstitution Method:	Restore with 1 ml sterile distilled water.
Conjugation:	Unconjugated
Storage:	Prior to reconstitution store at 2-8°C. Following reconstitution store undiluted at 2-8°C for one week or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	complement component 4A (Rodgers blood group)
Database Link:	Entrez Gene 717 Human Entrez Gene 720 Human P0C0L4
Synonyms:	Complement component 4, CPAMD2, CPAMD3, Acidic complement C4, Basic complement C4
Note:	Adsorption: Immunoaffinity adsorbed using insolubilized antigens as required, to eliminate antibodies reacting with other plasma proteins. The use of insolubilized adsorption antigens prevents the presence of excess adsorbent protein or immune complexes in the antiserum.
Protein Families:	Druggable Genome, Protease, Secreted Protein
Protein Pathways:	Complement and coagulation cascades, Systemic lupus erythematosus