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Product datasheet for AP21451BT-N

C3 Goat Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, ID, IF, IP, WB
Recommended Dilution:	Can be used to determine the presence and pattern of C3 in tissue lesions using immunohistochemical staining techniques. Locally deposited immune complexes in tissue usually contain complement, pointing to activation of the classical pathway. Complement activation in vivo implies active disease and may contribute to the elicitation of the pathogenesis and he extent of tissue destruction. In ELISA and Western blotting to identify guinea pig C3c in serum or other body fluids. As a second step an avidin or streptavidin conjugate of the user's choice has to be used. This immunoconjugate is not pre-diluted. The optimum working dilution of each conjugate should be established by titration before being used. Excess labelled antibody must be avoided because it may cause high unspecific background staining and interfere with the specific signal. Recommended working dilutions: Histochemical and Cytochemical: 1/100 - 1/500. ELISA and comparable non-precipitating antibody-binding assays: 1/1000 - 1/5000.
Reactivity:	Guinea Pig
Host:	Goat
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	C3c is isolated and purified from pooled normal guinea pig serum. Freund's complete adjuvant is used in the first step of the immunization procedure.

Specificity:	In immunoelectrophoresis against fresh guinea pig serum, a single precipitin line is obtained in the beta-1 region representing native C3. Against serum containing partly activated C3, a precipitin line is obtained which extends from the beta-1 into the alpha-2 region, demonstrating a gradient. In old serum containing totally activated C3 a single precipitin line in the alpha-2 region is obtained. Antisera to C3c cab also react with the fragments C3b, C3bi and smaller fragments, since they all carry antigenic determinants of the C3c domain. The product does not react with any other proteins component of guinea pig serum or plasma. Cross-reactivity: The antiserum does not cross-react with any other component of guinea pig plasma. Inter-species cross-reactivity is a normal feature of antibodies to plasma proteins since they frequently share antigenic determinants. Cross-reactivity of this antiserum has not been tested in detail.
Formulation:	PBS, pH 7.2 without preservatives and foreign pr Label: Biotin State: Lyophilized hyperimmune IgG fraction Label: Marker: N-Hydroxysuccinimidobiotin. Manufacturing procedure: A proprietary technique for the binding to biotin is used, followed by several purification steps. After each step activity and specificity are tested in a variety of techniques. The conjugate is lyophilized to assure stability and long shelf life Molar radio: Biotin/IgG ~ 6.6
Reconstitution Method:	Restore by adding 1.0 ml of sterile distilled water
Concentration:	lot specific
Purification:	Ammonium Sulphate Precipitation and Ion Exchange Chromatography
Conjugation:	Biotin
Storage:	Prior to and following reconstitution store the antibody at 2-8°C for one month or at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	complement component 3
Database Link:	Entrez Gene 24232 Rat P01026

Background: C3 is the most abundant complement protein in guinea pig serum. Its biological function strongly resembles that of C3 in man an other laboratory animal species. It has a central role in the activation system being common to both pathways. Activation of C3 is achieved by very specific limited proteolysis resulting in the release of a number of degradation fragments. The anaphylotoxin C3a promotes smooth muscle contraction and increases vascular permeability: the large C3b fragment is involved in binding to the complement activator and can be interact with specific receptors to allow efficient clearance of the activating cell or particle; degradation fragments of C3b (C3bi, C3c, C3dg C3d) are important in receptor binding and clearance mechanisms, in virus neutralization and possibly in the immune response. The antiserum is raised against C3c, which is the major fragment resulting from C3 cleavage by C3 convertase and factor I. It is composed of an intact beta chain bound to two fragments of the alpha chain. Consequently the antiserum reacts with both native and activated C3. It may also react with the fragments C3b, C3bi and C3dg, since they all carry antigenic epitopes of the C3c domain.

Synonyms: CPAMD1, Complement component 3

Note: Adsorption: Immunoaffinity adsorbed using insolubilized antigens as required, to eliminate antibodies reacting with other with other plasma proteins. The use of insolubilized adsorption antigens prevents the presence of excess adsorbent protein or immune complexes in the antiserum.