

Product datasheet for AP31083BT-N

C3 Goat Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: ELISA, ID, IF, IHC, IP, WB

Recommended Dilution: This Biotin immunoconjugate antibody to Monkey C3c is 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

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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.

Suitable for use in ELISA and Western blotting to identify Monkey C3c in serum or other body

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. **Working Dilutions:**

Histochemical and Cytochemical Use: 1/50-1/250.

ELISA and comparable non-precipitating antibody-binding assays: 1/100-1/500.

Reactivity: Monkey

Host: Goat

Isotype: lgG

Clonality: Polyclonal

Immunogen: C3c isolated and purified from pooled normal Rhesus Monkey serum.

Freund's complete adjuvant is used in the first step of the immunization procedure.



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Specificity:

In Immunoelectrophoresis against fresh Monkey 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 protein components of Monkey serum or plasma. **Cross-reactivity:** The antiserum does not cross-react with any other component of monkey plasma. Inter-species cross-reactivity is a normal feature of antibodies to plasma proteins since they frequently share antigenic determinants. In addition to a clear reactivity with C3c of other old-world monkeys (Cercopithecus, Cynomolgus and Baboon), this antiserum shows also a fair amount of cross-reactivity to C3C of other species, including chimpanzee and man.

Formulation: PBS, pH 7.2 without preservatives

Label: Biotin

State: Lyophilized purified IgG fraction

Molar radio: Biotin/IgG ~4.9

Reconstitution Method: Restore by adding 1 ml of sterile distilled water.

Concentration: lot specific

Purification: The IgG fraction is isolated and purified from the antiserum and contains the bulk of the

defined antibody specificity. It is free of other serum proteins as tested by

immunoelectrophoresis and double radial immunodiffusion.

Conjugation: Biotin

Storage: Store the antibody lyophilized at 2-8°C and reconstituted at 2-8°C for one week or (in aliquots)

at -20°C for longer.

If a slight precipitation occurs upon storage, this should be removed by centrifugation.

Stability: Shelf life: one year from despatch.

Gene Name: complement component 3

Database Link: Entrez Gene 24232 Rat

P01026



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Background:

C3 is the most abundant complement protein in rat serum. Its biological function strongly resembles that of C3 in man and 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.

Synonyms:

CPAMD1, Complement component 3

Note:

Adsorption: Immunoaffinity adsorbed using insolubilized antigens as required, to eliminate antibodies cross-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.