

Sheep Anti-Human Complement-C4 Polyclonal Antibody

Sheep, Polyclonal (Complement-C4)

Cat. No. DPAB0964

Lot. No. (See product label)

PRODUCT INFORMATION

Product Overview: Sheep Antibody to Human Complement C4

Specificity: Unconjugated immunoglobulin gives a single arc when tested by immunoelectrophoresis against fresh human plasma. Identity has been confirmed by double diffusion (Ouchterlony) against human plasma.

Host animal: Sheep

Format: FITC, Liquid

Applications: Suitable for use in direct immunofluorescence testing. Using frozen sections of human skin containing C4 deposits: 1:50-1:100. Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded.

Purification: Ion-exchange chromatography (DEAE) and zone electrophoresis is performed to ensure that only a gamma mobility component is present. The immunoglobulin is then conjugated with fluorescein isothiocyanate (FITC). Unreacted fluorochrome is removed by gel filtration. Preservatives are added. Product is 0.2µm filtered.

PACKAGING

Concentration: Not determined

Buffer: PBS; pH 7.2

Preservative: 0.099% Sodium azide

Storage: Store at 2–8°C. Slight precipitation can occur on storage, which may be removed by centrifugation, and should not affect performance characteristics.

Warning: This product contains sodium azide, which has been classified as Xn (Harmful), in European Directive 67/548/EEC in the concentration range of 0.1–1.0%. When disposing of this reagent through lead or copper plumbing, flush with copious volumes of water to prevent azide build-up in drains.

BACKGROUND

Introduction: C4 consists of three polypeptide chains (alpha, molecular weight 95 kDa, beta, molecular weight 75 kDa and gamma, molecular weight 33 kDa) and is usually present in serum at 200-600mg/L. It is a protein of the classical complement pathway. When activated by C1s, a peptide C4a is released and the generated C4b binds C2 which is in turn cleaved by C1s to produce the classical pathway C3 convertase, namely C4b2a. C4b also has opsonin activity and binds to macrophages and neutrophils via their CR1 receptor.

Keywords: Acidic C4; Acidic complement C4; Basic C4; Basic complement C4; C4 Anaphylatoxin; C4 propeptide; Rodgers Form Of C4; Complement-C4; C4

REFERENCES

1. Liu CC, Manzi S, Kao AH, Navratil JS, Ruffing MJ, Ahearn JM (2005). "Reticulocytes bearing C4d as biomarkers of disease activity for systemic lupus erythematosus". *Arthritis Rheum.* 52 (10): 3087–99.
2. Kristiansson MH et al. Comparative time-dependent analysis of potential inflammation biomarkers in lymphoma-bearing SJL mice. *J Proteome Res* 6:1735-44.