

**Rabbit Anti-Complement C3 Polyclonal: RC0002**

**Intended Use:** For Research Use Only

**Description:** C3 plays a central role in the activation of the complement system. Its processing by C3 convertase is the central reaction in both classical and alternative complement pathways. After activation C3b can bind covalently, via its reactive thioester, to cell surface carbohydrates or immune aggregates. Derived from proteolytic degradation of complement C3, C3a anaphylatoxin is a mediator of local inflammatory process. It induces the contraction of smooth muscle, increases vascular permeability and causes histamine release from mast cells and basophilic leukocytes. Acylation stimulating protein (ASP): adipogenic hormone that stimulates triglyceride (TG) synthesis and glucose transport in adipocytes, regulating fat storage and playing a role in postprandial TG clearance. Appears to stimulate TG synthesis via activation of the PLC, MAPK and AKT signaling pathways. Ligand for C5AR2. Promotes the phosphorylation, ARRB2-mediated internalization and recycling of C5AR2.

**Specifications:**

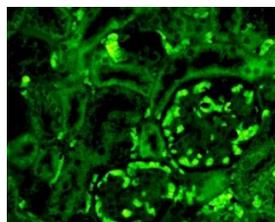
Clone: Polyclonal  
 Source: Rabbit  
 Isotype: IgG  
 Reactivity: Human, mouse, rat, bovine  
 Localization: Cytoplasm, secreted  
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, IF  
 Package:

Description	Catalog No.	Size
Complement C3 Concentrated	RC0002	1 ml

**IHC Procedure\*:**

Positive Control Tissue: Liver, cerebral cortex and cardiac muscle tissues; kidney, lung  
 Concentrated Dilution: 10-100  
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT (IHC) or 37°C (IF)  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE mouse kidney stained with anti-Complement C3 followed by FITC conjugated goat anti-rabbit at 37°C

**References:**

1. Nonrenal and renal activity of systemic lupus erythematosus: a comparison of two anti-C1q and five anti-dsDNA assays and complement C3 and C4. Julkunen H, et al. Rheumatol Int. Aug;32(8):2445-51, 2012.
2. Mice lacking C1q or C3 show accelerated rejection of minor H disparate skin grafts and resistance to induction of tolerance. Baruah P, et al. Eur J Immunol. Jun;40(6):1758-67, 2010.
3. Induction of C3 and CCL2 by C3a in keratinocytes: a novel autocrine amplification loop of inflammatory skin reactions. Purwar R, et al. J Immunol. Oct 1;177(7):4444-50, 2006.

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