

**Rabbit Anti-C4d Polyclonal: RC0296, RC0296RTU7**

**Intended Use:** For Research Use Only

**Description:** Complement component 4, or C4, plays a central role in the complement system. C4d is the final proteolytic remnant of deposited C4b on endothelium and remains covalently attached to endothelium for little more than a week. It is easily detectable by Immunohistochemistry. This antibody combined with anti-C3d can be utilized as a tool for diagnosis of AR (Acute Rejection) and warrant prompt and aggressive anti-rejection treatment. C4d can be detected in peritubular capillaries in both chronic renal allograft rejection as well as hyperacute rejection, acute vascular rejection, acute cellular rejection, and borderline rejection. It has been shown to be a significant predictor of transplant kidney graft survival and is an aid in treating acute rejection.

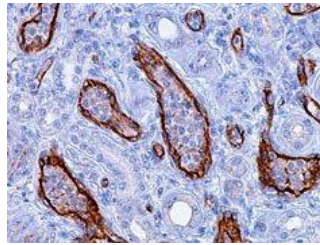
**Specifications**

Clone: Polyclonal  
Source: Rabbit  
Isotype : IgG  
Localization: Cytoplasm, membrane  
Formulation: Purified antibody in PBS buffer pH 7.5, containing 0.2% BSA and 15mM sodium azide (NaN<sub>3</sub>)  
Storage: Store at 2°- 8°C. For longer periods of storage, store at -20°C. Avoid repeat freeze-thaw cycles  
Applications: IHC  
Package:

Description	Catalog No.	Size
C4d Concentrated	RC0296	1 ml
C4d Prediluted	RC0296RTU7	7 ml

**IHC Procedure\***

Positive Control Tissue: Acute rejected kidney transplant  
Concentrated Dilution: 25-100  
Pretreatment: Citrate pH 6.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
Incubation Time and Temp: 30-60 minutes @ RT  
Detection: Refer to the detection system manual  
\* Result should be confirmed by an established diagnostic procedure.



Human renal allograft FFPE tissue stained with anti-C4d using DAB

**References:**

1. Immunohistochemistry staining of C4d to diagnose antibody-mediated rejection in cardiac transplantation. Fedson SE et al. J Heart Lung Transplant 2008;27:372-9.
2. Poezl G et al. Capillary deposition of the complement fragment C4d in cardiac allograft biopsies is associated with allograft vasculopathy. Fedson SE et al. Transplant Int. 18 (2005); 313-317.
3. Antibody-mediated rejectin in human cardiac allografts: Evaluatin of immunoglobulins and complement activation products C4d and C3d as markers. Rodriquez ER et al. Am J Transplantation 2005; 5: 2778-2785.
4. Immunoperoxidase staining for C4d on paraffin-embedded tissue in cardiac allograft endomyocardial biopsies. Chantranawat C et al. Appl immunohistochem Mol Morphol. 2004; 12: 166-171.
5. C4d immunohistochemical stain is a sensitive method to confirm immunoreactant deposition in formalin-fixed paraffin-embedded tissue in bullous pemphigoid. Chandler W et al. J Cutan Pathol 2009; 36: 655-659.