

# Recombinant Complement 4d (C4d) (Acute Humoral Rejection Marker) Antibody

Rabbit Monoclonal Antibody [Clone C4D/9213R]

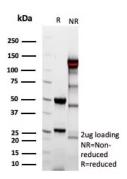
Catalog No	Format	Size
720-RBM7-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
720-RBM7-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
720-RBM7-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details		
Clone	C4D/9213R	
Gene Name		
Immunogen	Recombinant full-length human Complement 4d protein	
Host	Rabbit	
Clonality	Monoclonal	
Isotype / Light Chain	IgG / Kappa	
Mol. Weight of Antigen	192kDa (predicted)	
Cellular Localization	Intracytoplasmic vacuoles of endothelial cells. Secreted.	
Species Reactivity	Human	
Positive Control	Rejected Renal Transplant Tissue	

<sup>\*</sup>Optimal dilution for a specific application should be determined.

## Product Images for Recombinant Complement 4d (C4d) (Acute Humoral Rejection Marker) Antibody



SDS-PAGE Analysis of Purified Complement 4d Mouse Monoclonal Antibody (C4D/9213R). Confirmation of Integrity and Purity of Antibody.



#### **Specificity & Comments**

This MAb is specific to Complement 4d (C4d) and reacts with the secreted as well as cell-bound C4d.C4d is a degradation product of the activated complement factor C4b. Complement 4b is typically activated by binding of Abs to specific target molecules. Following activation and degradation of the C4 molecule, thio-ester groups are exposed, which allow transient, covalent binding of the degradation product Complement 4d to endothelial cell surfaces and extracellular matrix components of vascular basement membranes near the sites of C4 activation. The presence of C4d in peritubular capillaries is a key indicator for acute humoral (i.e. antibodymediated) rejection of kidney, heart, pancreas and lung allografts. As an established marker of antibody-mediated acute renal allograft rejection and its proclivity for endothelium, this component can be detected in peritubular capillaries in 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. Anti-C4d, combined with anti-C3d, can be utilized as a tool for diagnosis of allograft rejection that may warrant a prompt and aggressive antirejection treatment.

#### Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

## Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

#### **Research Areas**

Immunology

# **Limitations and Warranty**

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

