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

Mouse Monoclonal Antibody [Clone SPM545]

Catalog No	Format	Size
720-MSM1X-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
720-MSM1X-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
720-MSM1X-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

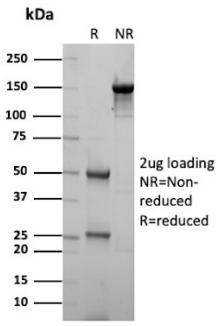
Applications	Tested Dillution	Note
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

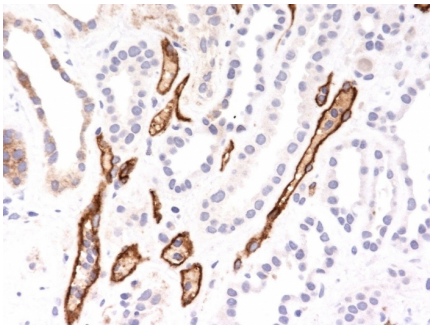
Clone	SPM545
Gene Name	C4A, N/A
Immunogen	Recombinant human Complement 4d protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1 / Kappa
Mol. Weight of Antigen	192kDa (predicted)
Cellular Localization	N/A
Species Reactivity	Human
Positive Control	Rejected Renal Transplant Tissue.

**Optimal dilution for a specific application should be determined.*

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



SDS-PAGE Analysis of Purified N/A Mouse Monoclonal Antibody (SPM545). Confirmation of Purity and Integrity of Antibody.



Formalin-fixed, paraffin-embedded human Kidney Transplant stained with Complement 4d Monoclonal Antibody (SPM545).

Specificity & Comments

This MAb is specific to Complement 4d (C4d) and it 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. antibody-mediated) 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 anti-rejection 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.