# **Product Datasheet**

# Complement C4d Antibody (SPM545) - IHC-Prediluted NBP2-48107

Unit Size: 7 ml

Store at 4C.

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# NBP2-48107

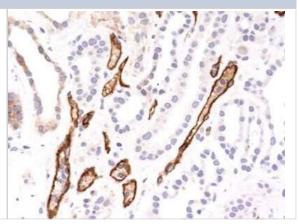
Complement C4d Antibody (SPM545) - IHC-Prediluted

Complement C4d Antibody (SPMS45) - InC-Prediluted	
Product Information	
Unit Size	7 ml
Concentration	Please see the vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C.
Clonality	Monoclonal
Clone	SPM545
Preservative	0.05% Sodium Azide
Isotype	IgG1 Kappa
Purity	Protein A or G purified
Buffer	10 mM PBS with 0.05% BSA
Target Molecular Weight	192 kDa
Product Description	
Description	The prediluted antibody does not require any mixing, dilution, reconstitution, or titration; the antibody is ready-to-use and optimized for staining.
Host	Mouse
Gene ID	720
Gene Symbol	C4A
Species	Human
Marker	Acute Humoral Rejection Marker
Specificity/Sensitivity	This monoclonal antibody 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.
Immunogen	Recombinant human Complement Complement C4d protein
Product Application Details	
Applications	Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Immunohistochemistry, Immunohistochemistry-Paraffin
Application Notes	Immunohistochemistry (Formalin-fixed): 1:200-1:400 for 30 minutes at RT. Staining of formalin-fixed tissues requires heating tissue sections in 1mM EDTA, pH 7.5-8.5, for 45 min at 95C followed by cooling at RT for 20 minutes. Optimal dilution for a specific application should be determined.



# **Images**

Immunohistochemistry-Paraffin: Complement C4b/d Antibody (SPM545) - IHC-Prediluted [NBP2-48107] - Formalin-fixed, paraffin-embedded kidney transplant tissue (40X) stained with Complement 4d Ab (SPM545).





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### **Products Related to NBP2-48107**

HAF007 Goat anti-Mouse IgG Secondary Antibody [HRP]

NB720-B Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]

NBP1-43319-0.5mg Mouse IgG1 Kappa Isotype Control (P3.6.2.8.1)

210-TA-005 TNF-alpha [Unconjugated]

#### Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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