

# 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**

<b>Product Information</b>	
<b>Unit Size</b>	7 ml
<b>Concentration</b>	Please see the vial label for concentration. If unlisted please contact technical services.
<b>Storage</b>	Store at 4C.
<b>Clonality</b>	Monoclonal
<b>Clone</b>	SPM545
<b>Preservative</b>	0.05% Sodium Azide
<b>Isotype</b>	IgG1 Kappa
<b>Purity</b>	Protein A or G purified
<b>Buffer</b>	10 mM PBS with 0.05% BSA
<b>Target Molecular Weight</b>	192 kDa
<b>Product Description</b>	
<b>Description</b>	The prediluted antibody does not require any mixing, dilution, reconstitution, or titration; the antibody is ready-to-use and optimized for staining.
<b>Host</b>	Mouse
<b>Gene ID</b>	720
<b>Gene Symbol</b>	C4A
<b>Species</b>	Human
<b>Marker</b>	Acute Humoral Rejection Marker
<b>Specificity/Sensitivity</b>	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.
<b>Immunogen</b>	Recombinant human Complement Complement C4d protein
<b>Product Application Details</b>	
<b>Applications</b>	Immunohistochemistry, Immunohistochemistry-Paraffin
<b>Recommended Dilutions</b>	Immunohistochemistry, Immunohistochemistry-Paraffin
<b>Application Notes</b>	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**

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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]

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### **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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