

# Product Datasheet

## Complement C4d Antibody (SPM545) - IHC-Prediluted NBP2-44792

Unit Size: 7 ml

Store at 4C.

[www.novusbio.com](http://www.novusbio.com)



[technical@novusbio.com](mailto:technical@novusbio.com)

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:  
[www.novusbio.com/NBP2-44792](http://www.novusbio.com/NBP2-44792)

Updated 8/16/2019 v.20.1

Earn rewards for product reviews and publications.

Submit a publication at [www.novusbio.com/publications](http://www.novusbio.com/publications)

Submit a review at [www.novusbio.com/reviews/destination/NBP2-44792](http://www.novusbio.com/reviews/destination/NBP2-44792)



**NBP2-44792**

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

**Product Information**

<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>	10mM PBS and 0.05% BSA
<b>Target Molecular Weight</b>	192 kDa

**Product Description**

<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

**Product Application Details**

<b>Applications</b>	Immunohistochemistry, Immunohistochemistry-Paraffin
<b>Recommended Dilutions</b>	Immunohistochemistry, Immunohistochemistry-Paraffin
<b>Application Notes</b>	Hu-chromosome location: 6p21.3 Molecular weight of antigen: 192kDa (predicted) Immunohistochemistry-Paraffin 1:200 - 1:400 for 30 minutes at RT; Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 10 - 20 min followed by cooling at RT for 20 minutes.



## **Novus Biologicals USA**

10730 E. Briarwood Avenue  
Centennial, CO 80112  
USA  
Phone: 303.730.1950  
Toll Free: 1.888.506.6887  
Fax: 303.730.1966  
[novus@novusbio.com](mailto:novus@novusbio.com)

## **Bio-Techne Canada**

21 Canmotor Ave  
Toronto, ON M8Z 4E6  
Canada  
Phone: 905.827.6400  
Toll Free: 855.668.8722  
Fax: 905.827.6402  
[canada.inquires@bio-techne.com](mailto:canada.inquires@bio-techne.com)

## **Bio-Techne Ltd**

19 Barton Lane  
Abingdon Science Park  
Abingdon, OX14 3NB, United Kingdom  
Phone: (44) (0) 1235 529449  
Free Phone: 0800 37 34 15  
Fax: (44) (0) 1235 533420  
[info.EMEA@bio-techne.com](mailto:info.EMEA@bio-techne.com)

## **General Contact Information**

[www.novusbio.com](http://www.novusbio.com)  
Technical Support: [technical@novusbio.com](mailto:technical@novusbio.com)  
Orders: [orders@novusbio.com](mailto:orders@novusbio.com)  
General: [novus@novusbio.com](mailto:novus@novusbio.com)

## **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.

**For more information on our 100% guarantee, please visit [www.novusbio.com/guarantee](http://www.novusbio.com/guarantee)**

**Earn gift cards/discounts by submitting a review: [www.novusbio.com/reviews/submit/NBP2-44792](http://www.novusbio.com/reviews/submit/NBP2-44792)**

**Earn gift cards/discounts by submitting a publication using this product:  
[www.novusbio.com/publications](http://www.novusbio.com/publications)**