

# Product Datasheet

## Complement C4d Antibody (SPM545) [Janelia Fluor® 525] NBP2-34421JF525

Unit Size: 0.1 ml

Store at 4C in the dark.

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**NBP2-34421JF525**

Complement C4d Antibody (SPM545) [Janelia Fluor® 525]

| Product Information         |  |
|-----------------------------|--|
| Unit Size                   | 0.1 ml   |
| Concentration               | Please see the vial label for concentration. If unlisted please contact technical services.  |
| Storage                     | Store at 4C in the dark.   |
| Clonality                   | Monoclonal   |
| Clone                       | SPM545   |
| Preservative                | 0.05% Sodium Azide   |
| Isotype                     | IgG1 Kappa   |
| Conjugate                   | Janelia Fluor 525  |
| Purity                      | Protein A or G purified  |
| Buffer                      | 50mM Sodium Borate   |
| Product Description         |  |
| 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  |
| Notes                       | Sold under license from the Howard Hughes Medical Institute, Janelia Research Campus.  |
| Product Application Details |  |
| Applications                | Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin  |
| Recommended Dilutions       | Immunohistochemistry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin, Immunohistochemistry-Frozen  |



**Application Notes**

Optimal dilution of this antibody should be experimentally determined.





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### **Products Related to NBP2-34421JF525**

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|            |  |
|------------|--|
| 210-TA-005 | TNF-alpha [Unconjugated]                         |
| DIP100     | CXCL10/IP-10/CRG-2 [HRP]                         |
| MAB1455    | Albumin Antibody (188835) [Unconjugated] - Serum |
| DY1707     | C-Reactive Protein/CRP [Biotin]                  |

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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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