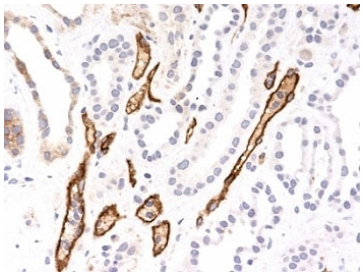
Complement 4d Antibody SPM545 / C4d Monoclonal Antibody [clone SPM545] (V9091)

Catalog No.	Formulation	Size
V9091-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V9091-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V9091SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V9091IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	SPM545
Purity	Protein G affinity chromatography
UniProt	P0C0L4, P0C0L5
Localization	Intracytoplasmic vacuoles of endothelial cells, secreted
Applications	Immunohistochemistry (FFPE): 1:200-1:400 for 30 min at RT
Limitations	This Complement 4d Antibody SPM545 is available for research use only.



Complement 4d Antibody SPM545 Immunohistochemistry. IHC testing of FFPE human kidney transplant with Complement 4d antibody (SPM545). Required HIER: boil tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 10-20 min followed by cooling at RT for 20 minutes.

Description

Complement 4d Antibody SPM545 / C4d 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.

For an established mouse monoclonal with published use, see our C4d Antibody C4D204 / Complement 4d Antibody page.

Application Notes

The optimal dilution of the Complement 4d Antibody SPM545 / C4d Monoclonal Antibody for each application should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Recombinant human C4d protein was used as the immunogen for this Complement 4d Antibody SPM545.

Storage

Store the Complement 4d Antibody SPM545 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

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