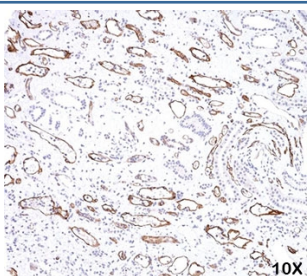


C4d Antibody / Complement 4d [clone C4D204] (V2021)

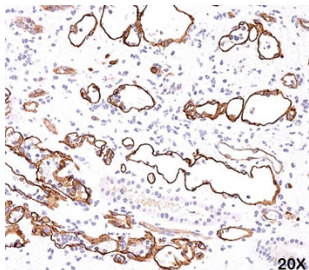
Catalog No.	Formulation	Size
V2021-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2021-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2021SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2021IHC-7ML	Prediluted 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](#)

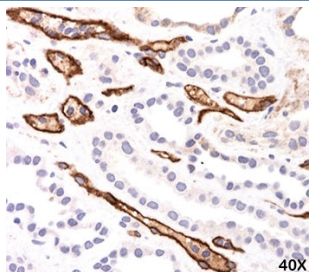
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	C4D204
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
Gene ID	720
Localization	Intracytoplasmic vacuoles of endothelial cells; Secreted
Applications	ELISA : 1-2ug/ml for coating (order BSA/sodium azide-free format) Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This C4d antibody is available for research use only.



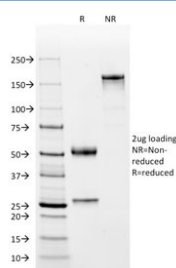
IHC testing of FFPE human kidney transplant tissue (10X) stained with C4d antibody (C4D204).



IHC testing of FFPE human kidney transplant tissue (20X) stained with C4d antibody (C4D204).



IHC testing of FFPE human kidney transplant tissue (40X) stained with Complement 4d / C4d antibody (C4D204).



SDS-PAGE analysis of purified, BSA-free C4d antibody (clone C4D204) as confirmation of integrity and purity.

Description

This antibody is specific to Complement 4d (C4d) and it reacts with the secreted as well as cell-bound protein. C4d is a degradation product of the activated complement factor C4b. Complement 4b is typically activated by binding of antibodies 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 C4d 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. C4d has been shown to be a significant predictor of transplant kidney graft survival. C4d antibody, combined with antibody to C3d, can be utilized as a tool for diagnosis of allograft rejection that may warrant a prompt and aggressive anti-rejection treatment.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the C4d antibody to be titrated up or down for optimal performance.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 1mM EDTA, pH 7.5-8.5, for 10-20 min followed by cooling at RT for 20 minutes.
2. 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 C4d antibody.

Storage

Store the C4d antibody at 2-8oC.

References (3)