

# Datasheet for ABIN6936545

# anti-C4B antibody



## Overview

Quantity:	100 μg
Target:	C4B (C4b)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This C4B antibody is un-conjugated
Application:	Immunofluorescence (IF), Immunohistochemistry (Formalin-fixed Sections) (IHC (f))

#### **Product Details**

Immunogen:	Recombinant human Complement 4d protein
Clone:	SPM545
Isotype:	IgG1 kappa
Specificity:	This MAb 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

### **Product Details**

	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.
Orean Department (D. 1. 11.)	rejection that may warrant a prompt and aggressive anti-rejection treatment.
Cross-Reactivity (Details):	Human.
Purification:	1.0mg/ml of Ab purified from Bioreactor by Protein A/G.
Target Details	
Target:	C4B (C4b)
Alternative Name:	C4B (C4b Products)
Background:	Acidic Complement C4, Basic C4, C4, C4-1, C4a Anaphylatoxin, C4A, C4A2, C4A3, C4A4, C4A6, C4b, C4B1, C4B12, C4d fragment, C4F, C4S, Complement C4 Gamma Chain, Complement Component 4A, Complement Component 4B, Complement 4d (C4d) (Acute Humoral Rejection Marker)  Cellular localisation: Intracytoplasmic vacuoles of endothelial cells and Secreted
Molecular Weight:	192kDa (predicted)
Gene ID:	720, 721, 534847
Pathways:	Complement System
Application Details	
Application Notes:	Known_Application: Immunofluorescence (1:50-1:100), Immunohistochemistry (Formalin-fixed) (1:200-1:400 for 30 minutes at RT)(Staining of formalin-fixed tissues requires heating tissue sections in 1 mM EDTA, pH 7.5-8.5, for 45 min at 95&degC followed by cooling at RT for 20 minutes)Optimal dilution for a specific application should be determined. Positive_Control: Rejected Renal Transplant Tissue.
Restrictions:	For Research Use only
Handling	
Concentration:	1.0 mg/mL
Buffer:	Prepared in 10 mM PBS, WITHOUT BSA and Azide.
Preservative:	Azide free

# Handling

Storage:	-20 °C,-80 °C
Storage Comment:	Antibody without azide store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous.
Expiry Date:	24 months