OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for AM32820PU-S

Complement C4A (C4A) Mouse Monoclonal Antibody [Clone ID: C4D204]

Product data:

Product Type:	Primary Antibodies
Clone Name:	C4D204
Applications:	IF, IHC
Recommended Dilution:	**Immunofluorescence:** 1/50-1/100. **Immunohistochemistry on Frozen and Formalin-Fixed Paraffin Sections:** 1/200-1/400 for 30 min at RT. 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. ***Positive Control***: Rejected Renal Transplant Tissue.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Recombinant Human Complement 4d protein.
Specificity:	This Monoclonal Antibody is specific to Complement 4d (C4d) and it reacts with the secreted as well as cell-bound C4d. ***Cellular Localization***: Intracytoplasmic vacuoles of endothelial cells and Secreted.
Formulation:	10mM PBS State: Purified State: Liquid purified IgG fraction from Bioreactor Concentrate Stabilizer: 0.05% BSA Preservative: 0.05% Sodium Azide
Concentration:	lot specific
Purification:	Protein A/G Chromatography
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	192 kDa (predicted)

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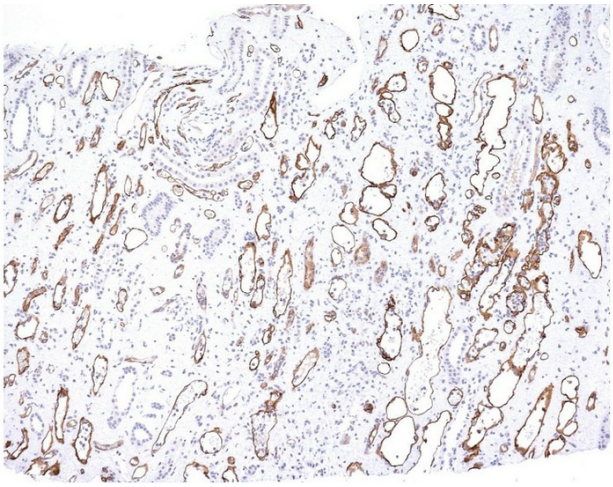
Gene Name: complement component 4A (Rodgers blood group)

Database Link: Entrez Gene 720 Human
P0C0L4

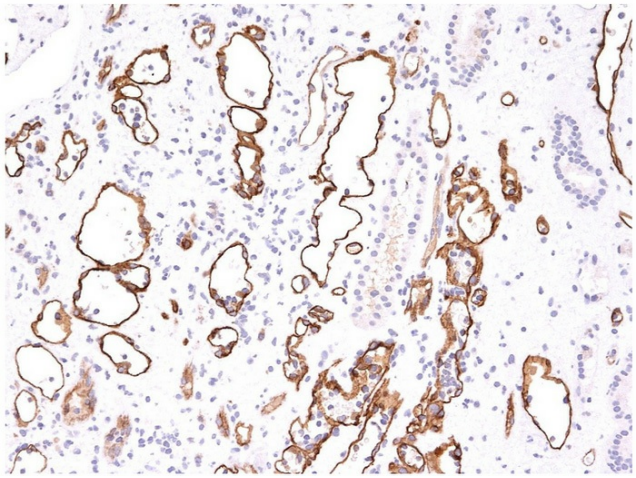
Background: C4d is a degradation product of the activated complement factor C4b. Complement 4b is typically activated by binding of Abs to specific target molecules. Following activation and degradation of the C4 molecule, thio-ester groups are exposed, which allow transient, covalent binding of the 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.

Synonyms: Complement Component 4, CPAMD2, CPAMD3

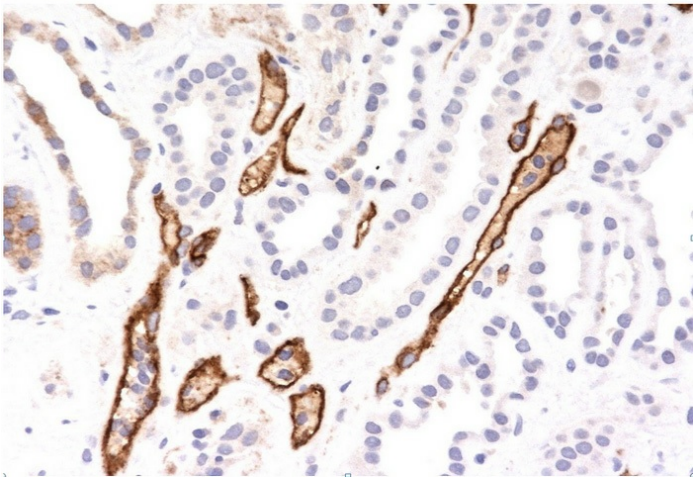
Product images:



Formalin-Fixed, Paraffin-Embedded kidney transplant tissue (10X) stained with Complement 4d Antibody AM50251PU (Clone C4D204).



Formalin-Fixed, Paraffin-Embedded kidney transplant tissue (20X) stained with Complement 4d Antibody AM50251PU (Clone C4D204).



Formalin-Fixed, Paraffin-Embedded kidney transplant tissue (40X) stained with Complement 4d Antibody AM50251PU (Clone C4D204).