

Mouse Anti-C4d [C4D204]: MC0631, MC0631RTU7

Intended Use: For Research Use Only

Description: Complement component 4, or C4, plays a central role in the complement system. C4d is the final proteolytic remnant of deposited C4b on endothelium and remains covalently attached to endothelium for little more than a week. It is easily detectable by Immunohistochemistry. This antibody combined with anti-C3d can be utilized as a tool for diagnosis of AR (Acute Rejection) and warrant prompt and aggressive anti-rejection treatment. C4d can be detected in peritubular capillaries in both 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 and is an aid in treating acute rejection.

Specifications:

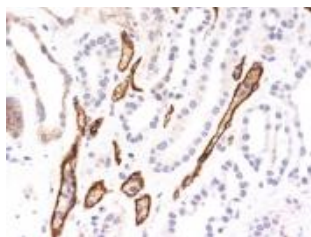
Clone: C4D204
Source: Mouse
Isotype: IgG1k
Reactivity: Human
Localization: Intracytoplasmic vacuoles of endothelial cells, secreted
Formulation: Antibody in PBS pH7.2, containing < 0.2% BSA and < 0.09% sodium azide (NaN₃).
Storage: Store at 2°- 8°C
Applications: IHC, ICC/IF
Package:

Description	Catalog No.	Size
C4d Concentrated	MC0631	1 ml
C4d Prediluted	MC0631RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Acute rejected kidney transplant
Concentrated Dilution: 100-200
Pretreatment: Citrate pH6.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
Incubation Time and Temp: 30-60 minutes @ RT
Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human kidney transplant tissue stained with anti-C4d using DAB

References:

1. Immunohistochemistry staining of C4d to diagnose antibody-mediated rejection in cardiac transplantation. Fedson SE et al. J Heart Lung Transplant 27:372-9, 2008.
2. Capillary deposition of the complement fragment C4d in cardiac allograft biopsies is associated with allograft vasculopathy. Fedson SE et al. Transplant Int. 18: 313-317, 2005.
3. Antibody-mediated rejectin in human cardiac allografts: Evaluatin of immunoglobulins and complement activation products C4d and C3d as markers. Rodriquez ER et al. Am J Transplantation 5: 2778-2785, 2005.
4. Immunoperoxidase staining for C4d on paraffin-embedded tissue in cardiac allograft endomyocardial biopsies. Chantranawat C et al. Appl immunohistochem Mol Morphol. 12: 166-171, 2004.