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PRODUCT DATASHEET

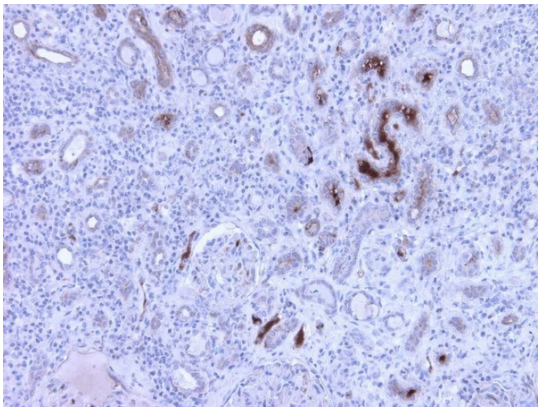
Anti-Complement C4c Antibody

Product Details

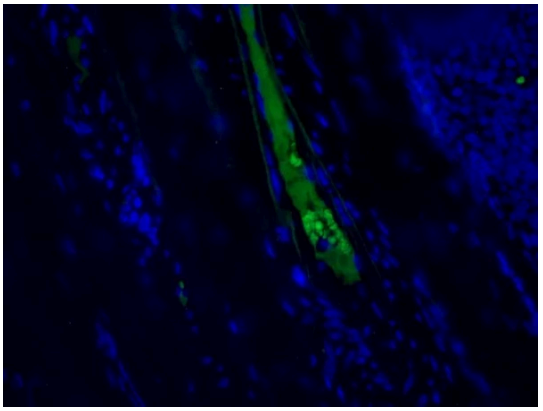
Available Variants	100 uL (SKU:CAM 072-18-010) 400 uL (SKU:CAM 072-18-04) 1000 uL (SKU:CAM 072-18-1)
Conjugate	Unconjugated
Isotype	IgG2b/k
Clone	99-72-18
Gene Name	C4A
Host Species	Mouse
Concentration	1 mg/mL ±15%
Format	Protein A or Protein G purified
Physical State	Liquid
Buffer	0.01 M phosphate buffer, pH 7.4, with 0.5 M NaCl and 15 mM sodium azide
Production Notes	BSA free
Applications	ELISA, IF, IHC, IP, WB
Dilution Ranges	IHC: 1:600
Species Reactivity	Human
Immunogen	Synthetic peptide consisting of the last 15C-terminal residues of the C4c a4-domain (Cys-EELVYELNPLDHRGR).`
Specificity	CAM 072-18 binds human complement factor C4c.
Molecular Weight	g-chain (30 kDa), a b-chain (75 kDa), and two a-domains denoted a3 (27 kDa) and a4 (14 kDa)
Storage	2-8°C without exposure to light
UniProt ID	P0C0L4 UniProt Summary: Precursor of non-enzymatic components of the classical,

	lectin and GZMK complement pathways, which consist in a cascade of proteins that leads to phagocytosis and breakdown of pathogens and signaling that strengthens the adaptive immune system. {ECO:0000269|PubMed:12878586, ECO:0000269|PubMed:18204047, ECO:0000269|PubMed:22691502, ECO:0000269|PubMed:22949645, ECO:0000269|PubMed:2395880, ECO:0000269|PubMed:32769120, ECO:0000269|PubMed:35428691, ECO:0000269|PubMed:39814882, ECO:0000269|PubMed:39914456, ECO:0000269|PubMed:8538770}.; [Complement C4b-A]: Non-enzymatic component of C3 and C5 convertases (PubMed:8538770). Generated following cleavage by complement proteases (C1S, MASP2 or GZMK, depending on the complement pathway), it covalently attaches to the surface of pathogens, where it acts as an opsonin that marks the surface of antigens for removal (PubMed:27738201, PubMed:8538770). It then recruits the serine protease complement C2b to form the C3 and C5 convertases, which cleave and activate C3 and C5, respectively, the next components of the complement pathways (PubMed:12878586, PubMed:18204047, PubMed:2387864, PubMed:6906228). Complement C4b-A isotype is responsible for effective binding to form amide bonds with immune aggregates or protein antigens, while complement C4b-B isotype catalyzes the transacylation of the thioester carbonyl group to form ester bonds with carbohydrate antigens (PubMed:8538770). {ECO:0000269|PubMed:12878586, ECO:0000269|PubMed:18204047, ECO:0000269|PubMed:2387864, ECO:0000269|PubMed:27738201, ECO:0000269|PubMed:6906228, ECO:0000269|PubMed:8538770}.; [C4a anaphylatoxin]: Putative humoral mediator released following cleavage by complement proteases (C1S, MASP2 or GZMK, depending on the complement pathway) (PubMed:6167582). While it is strongly similar to anaphylatoxins, its role is unclear (PubMed:25659340). Was reported to act as a mediator of local inflammatory process; however these effects were probably due to contamination with C3a and/C5a anaphylatoxins in biological assays (PubMed:25659340). {ECO:0000269|PubMed:6167582, ECO:0000303|PubMed:25659340}.
Country of Origin	United States
Shipping	Shipped on ice packs
Expiration	24 months from date of receipt
Usage Statement	These antibodies are to be used as research laboratory reagents and are not for use as diagnostic or therapeutic reagents in humans.
NCBI Gene ID	720, 721

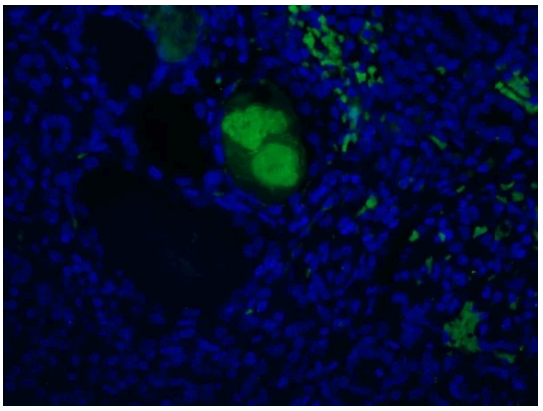
Product Images



Immunohistochemistry detection of Complement C4c in human kidney tissue using Anti-Complement C4c Antibody (Cat.CAM 072-18-010). Tissue was mounted and pariffin fixed. Heat induced antigen retrieval was performed using citrate buffer, heated, and then blocked. After washing, the primary antibody (Cat.CAM 072-18-010) was incubated with the sample at a dilution of 1:600. Strong staining of veins of nephritis kidney.



Immunofluorescent staining of Complement C4c in plasma in lumen of veins of human tonsil tissue using Anti-Complement C4c Antibody (Cat.CAM 072-18-010). Cells where fixed with formaldehyde and permeabilized prior to staining Primary antibody (CAM 072-18-010) was incubated with the cells at a dilution of 1:200.



Immunofluorescent staining of Complement C4c in Veins of human kidney with nephritis using Anti-Complement C4c Antibody (Cat.CAM 072-18-010). Cells where fixed with formaldehyde and permeabilized prior to staining Primary antibody (CAM 072-18-010) was incubated with the cells at a dilution of 1:200.