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# C2a Rabbit pAb

Catalog # AP97228

## Product Information

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| **Application** | IHC-P, IHC-F, IF |
| **Reactivity** | Human |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 56 KDa |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human C2a |
| **Epitope Specificity** | 401-500/752 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SIMILARITY** | Belongs to the peptidase S1 family. Contains 1 peptidase S1 domain. Contains 3 Sushi (CCP/SCR) domains. Contains 1 VWFA domain. |
| **SUBUNIT** | C2a interacts with Schistosoma haematobium TOR (viaN-terminal extracellular domain). This results in inhibition of theclassical and lectin pathway of complement activation, probably dueto interference with binding of C2a to C4b such that C3 convertasecannot be formed. This infers resistance to complement-mediatedcell lysis, allowing parasite survival and infection. |
| **DISEASE** | Defects in C2 are the cause of complement component 2deficiency (C2D) [MIM:217000]. A deficiency of the complementclassical pathway associated with the development of autoimmunedisorders, mainly systemic lupus erythematosus. Skin and jointmanifestations are common and renal disease is relatively rare.Patients with complement component 2 deficiency are also reportedto have recurrent or invasive infections. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | bs-10482P is onesynthetic peptide derived from human C2a. Component C2 is a serum glycoprotein that functions as part of the classical pathway of the complement system. Activated C1 cleaves C2 into C2a and C2b. The serine proteinase C2a then combines with complement factor 4b to create the C3 or C5 convertase. Deficiency of C2 has been reported to associated with certain autoimmune diseases and SNPs in this gene have been associated with altered susceptibility to age-related macular degeneration. This gene localizes within the class III region of the MHC on the short arm of chromosome 6. Alternative splicing results in multiple transcript variants encoding distinct isoforms. Additional transcript variants have been described in publications but their full-length sequence has not been determined.[provided by RefSeq, Mar 2009]. |

## Additional Information

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| **Gene ID** | 717 |

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| **Other Names** | CO2_MOUSE; C2; C3/C5 convertase; ARMD14; CO2; complement C2; complement component 2 |
| **Dilution** | IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 |
| **Storage** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |
| **Name** | C2a Rabbit pAb |
| **Function** | Component C2 which is part of the classical pathway ofthe complement system is cleaved by activated factor C1 into twofragments: C2b and C2a. C2a, a serine protease, then combines withcomplement factor 4b to generate the C3 or C5 convertase. |

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