

Product datasheet for **AP05369PU-N**

Complement C4A (C4A) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC
Recommended Dilution:	Immunohistochemistry on frozen sections: 1/20 - 1/80. Immunohistochemistry on paraffin sections: 1/20 - 1/80; Heat induced epitope retrieval is recommended. Immunofluorescence: 1/20 - 1/80.
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide corresponding to amino acids 1241-1256 of C4 conjugated to Keyhole limpet Haemocyanin.
Specificity:	This antibody is specific for complement split product C4d.
Formulation:	Phosphate buffered saline containing 0.09% Sodium Azide (NaN ₃) State: Purified State: Liquid purified IgG
Concentration:	lot specific
Purification:	Affinity chromatography on Protein G
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	complement component 4A (Rodgers blood group)
Database Link:	Entrez Gene 720 Human POCOL4



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Background:

C4 plays a central role in the activation of the classical pathway of the complement system. It is processed by activated C1 which removes from the alpha chain the C4a anaphylatoxin. The remaining alpha chain fragment C4b is the major activation product and is an essential subunit of the C3 convertase (C4b2a) and the C5 convertase (C3bC4b2a) enzymes of the classical complement pathway.

Derived from proteolytic degradation of complement C4, C4a anaphylatoxin is a mediator of local inflammatory process. It induces the contraction of smooth muscle, increases vascular permeability and causes histamine release from mast cells and basophilic leukocytes. Prior to secretion, the single-chain precursor is enzymatically cleaved to yield the non-identical chains (alpha, beta and gamma). During activation, the alpha chain is cleaved by C1 into C4a and C4b, and C4b stays linked to the beta and gamma chains. Further degradation of C4b by C1 into the inactive fragments C4c and C4d blocks the generation of C3 convertase.

Synonyms:

Complement Component 4, CPAMD2, CPAMD3

Protein Pathways:

Complement and coagulation cascades, Systemic lupus erythematosus