

**Anti-C4A Picoband Antibody**  
**Catalog # ABO12918****Specification****Anti-C4A Picoband Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P0COL4</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for C4A detection. Tested with WB in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-C4A Picoband Antibody - Additional Information**

**Gene ID** 720;721

**Other Names**

Complement C4-A, Acidic complement C4, C3 and PZP-like alpha-2-macroglobulin domain-containing protein 2, Complement C4 beta chain, Complement C4-A alpha chain, C4a anaphylatoxin, C4b-A, C4d-A, Complement C4 gamma chain, C4A, CO4, CPAMD2

**Application Details**

Western blot, 0.1-0.5 µg/ml<br>

**Subcellular Localization**

Secreted. Cell junction, synapse.

**Tissue Specificity**

Complement component C4 is expressed at highest levels in the liver, at moderate levels in the adrenal cortex, adrenal medulla, thyroid gland, and the kidney, and at lowest levels in the heart, ovary, small intestine, thymus, pancreas and spleen. The extra-hepatic sites of expression may be important for the local protection and inflammatory response.

**Contents**

Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence of human C4A (YMRIQQFRKADGSYAAWLSRDSSTWLTAFLKVLSLAQEQ).

**Cross Reactivity**

No cross reactivity with other proteins.

**Storage**

**At -20°C; for one year. After reconstitution, at 4°C; for one month. It can also be aliquotted and stored frozen at -20°C; for a longer time. Avoid repeated freezing and thawing.**

**Anti-C4A Picoband Antibody - Protein Information**

**Name** C4A {ECO:0000303|PubMed:6546707, ECO:0000312|HGNC:HGNC:1323}

**Function**

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.

**Cellular Location**

Secreted. Synapse Cell projection, axon. Cell projection, dendrite [Complement C4b-A]: Secreted. Cell surface. Note=Covalently associated with the surface of pathogens: the internal thioester bond reacts with carbohydrate antigens on the target surface to form amide or ester bonds.

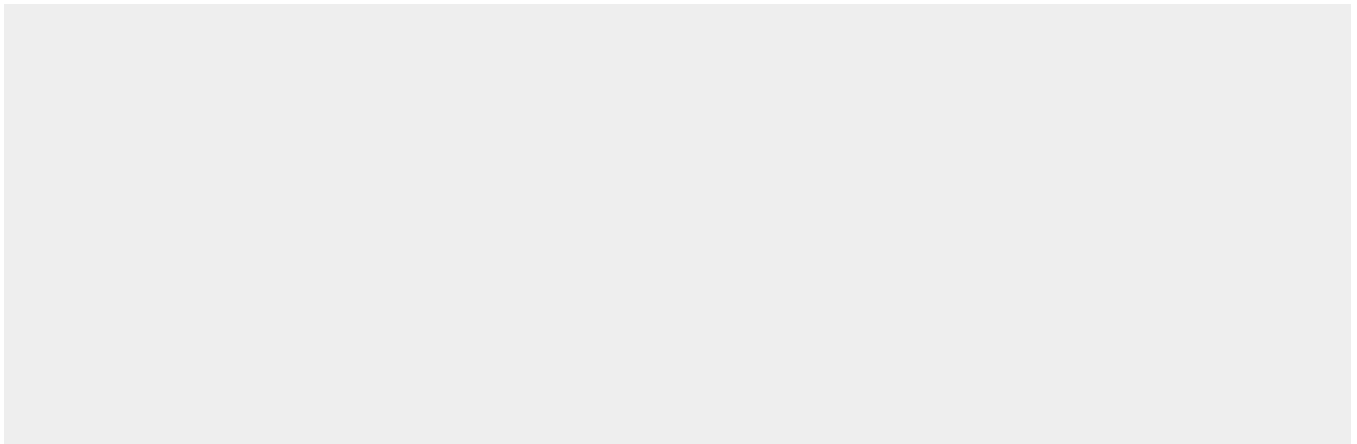
**Tissue Location**

Complement component C4 is expressed at highest levels in the liver, at moderate levels in the adrenal cortex, adrenal medulla, thyroid gland, and the kidney, and at lowest levels in the heart, ovary, small intestine, thymus, pancreas and spleen (PubMed:11367523). The extra-hepatic sites of expression may be important for the local protection and inflammatory response (PubMed:11367523).

**Anti-C4A Picoband Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-C4A Picoband Antibody - Images**

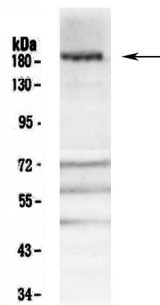


Figure 1. Western blot analysis of C4A using anti-C4A antibody (ABO12918).

#### **Anti-C4A Picoband Antibody - Background**

Complement C4-A is a protein that in humans is encoded by the C4A gene. This gene encodes the acidic form of complement factor 4, part of the classical activation pathway. The protein is expressed as a single chain precursor which is proteolytically cleaved into a trimer of alpha, beta, and gamma chains prior to secretion. The trimer provides a surface for interaction between the antigen-antibody complex and other complement components. The alpha chain is cleaved to release C4 anaphylatoxin, an antimicrobial peptide and a mediator of local inflammation. Deficiency of this protein is associated with systemic lupus erythematosus and type I diabetes mellitus. This gene localizes to the major histocompatibility complex (MHC) class III region on chromosome 6. Varying haplotypes of this gene cluster exist, such that individuals may have 1, 2, or 3 copies of this gene. Two transcript variants encoding different isoforms have been found for this gene.