

## C4a/b Polyclonal Antibody

<b>Catalog No :</b>	YT5542
<b>Reactivity :</b>	Human;Rat;Mouse;
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	CO4 A/B
<b>Fields :</b>	>>Complement and coagulation cascades;>>Alcoholic liver disease;>>Pertussis;>>Staphylococcus aureus infection;>>Coronavirus disease - COVID-19;>>Systemic lupus erythematosus
<b>Gene Name :</b>	C4A/C4B
<b>Protein Name :</b>	Complement C4-A/Complement C4-B
<b>Human Gene Id :</b>	720/721
<b>Human Swiss Prot No :</b>	P0C0L4/P0C0L5
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from the Internal region of human C4A/C4B. AA range:721-770
<b>Specificity :</b>	C4a/b Polyclonal Antibody detects endogenous levels of C4a/b protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC: 1:100-1:300. ELISA: 1:10000.. IF 1:50-200
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)

**Observed Band :** 180kD

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**Cell Pathway :** Complement and coagulation cascades;Systemic lupus erythematosus;

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**Background :** 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. [provided]

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**Function :** disease:Defects in C4A are the cause of C4A deficiency [MIM:120810].,disease:The C4A6 allotype is totally deficient in hemolytic activity.,function: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.,function: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.,miscellaneous:C4A allotypes react more rapidly with the amino group of peptide antigens

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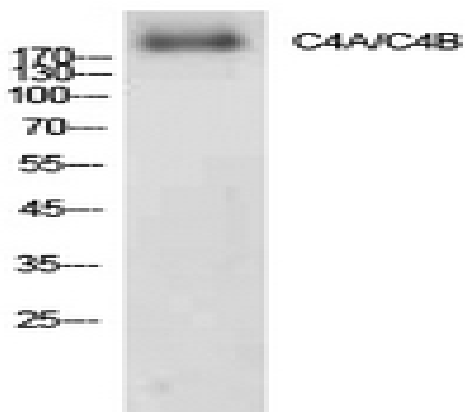
**Subcellular Location :** Secreted. Cell junction, synapse . Cell projection, axon . Cell projection, dendrite

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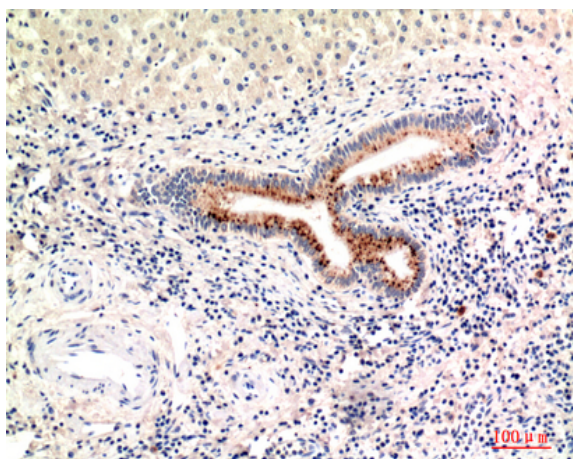
**Expression :** Complement component C4 is expressed at highest levels in the liver, at moderate levels in the adrenal cortex, adrenal medulla, thyroid gland, and the kidney, and at lowest levels in the heart, ovary, small intestine, thymus, pancreas and spleen. The extra-hepatic sites of expression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

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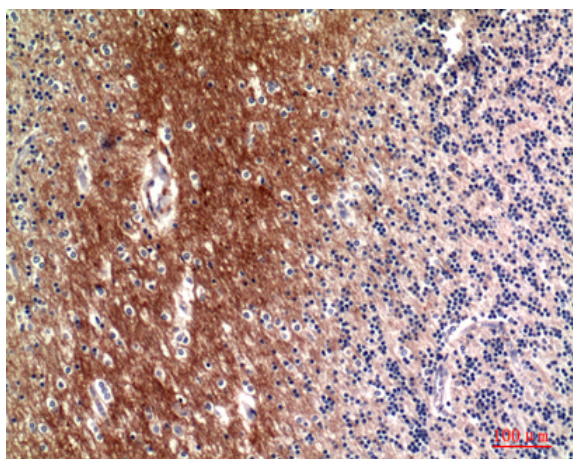
## Products Images



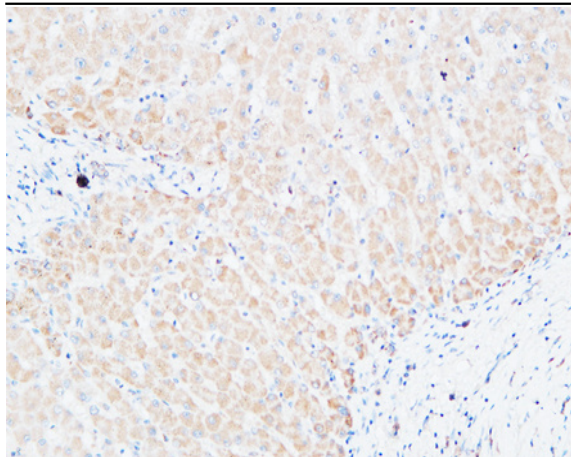
Western Blot analysis of AD293 cells using C4a/b Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



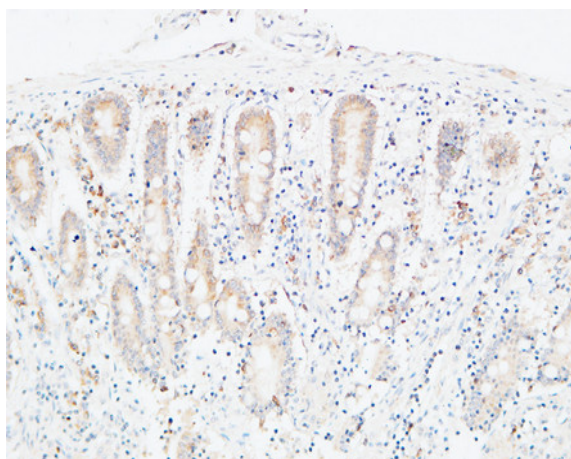
Immunohistochemical analysis of paraffin-embedded human-liver, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded human-brain, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded Human Liver. 1, Antibody was diluted at 1:100(4° overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



Immunohistochemical analysis of paraffin-embedded Human colon. 1, Antibody was diluted at 1:100(4° overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).