Anti-C9 Antibody [JE01-45]

HA722136

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IHC-P, IF-Tissue
Molecular Wt:	Predicted band size: 63 kDa
Clone number:	JE01-45

Description: Complement component 9 (C9) is a MACPF protein involved in the complement system, which is part of the innate immune system. Once activated, about 12-18 molecules of C9 polymerize to form pores in target cell membranes, causing lysis and cell death. C9 is one member of the complement membrane attack complex (MAC), which also includes complement components C5b, C6, C7 and C8. The formation of the MAC occurs through three distinct pathways: the classical, alternative, and lectin pathways. Pore formation by C9 is an important way that bacterial cells are killed during an infection, and the target cell is often covered in multiple MACs. The clinical impact of a deficiency in C9 is an infection with the gram-negative bacterium Neisseria meningitidis.

Immunogen: Recombinant fragment corresponding to Human C9.

Positive control: Human plasma tissue lysate, human serum tissue lysate, human colon tissue, human placenta tissue, human spleen tissue.

Subcellular location: Secreted, Target cell membrane.

Database links: SwissProt: P02748 Human

Recommended Dilutions:

WB	1:2,000
IHC-P	1:1,000
IF-Tissue	1:200

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

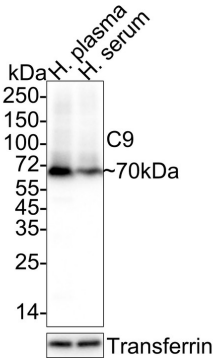

Fig1: Western blot analysis of C9 on different lysates with Rabbit anti-C9 antibody (HA722136) at 1/2,000 dilution.

Lane 1: Human plasma tissue lysate
Lane 2: Human serum tissue lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 63 kDa
Observed band size: 70 kDa

Exposure time: 10 seconds ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA722136) at 1/2,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

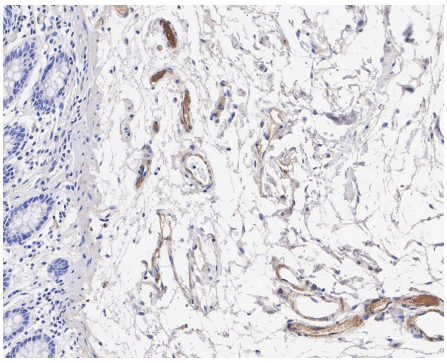

Fig2: Immunohistochemical analysis of paraffin-embedded human colon tissue with Rabbit anti-C9 antibody (HA722136) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA722136) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

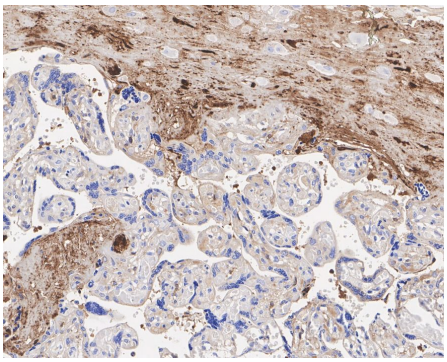

Fig3: Immunohistochemical analysis of paraffin-embedded human placenta tissue with Rabbit anti-C9 antibody (HA722136) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA722136) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

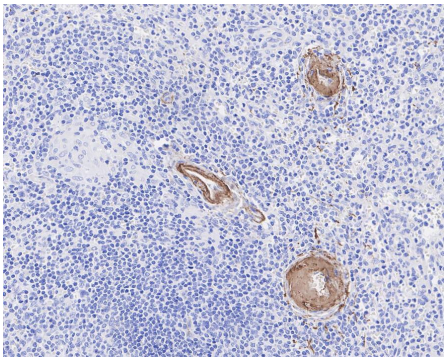

Fig4: Immunohistochemical analysis of paraffin-embedded human spleen tissue with Rabbit anti-C9 antibody (HA722136) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA722136) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

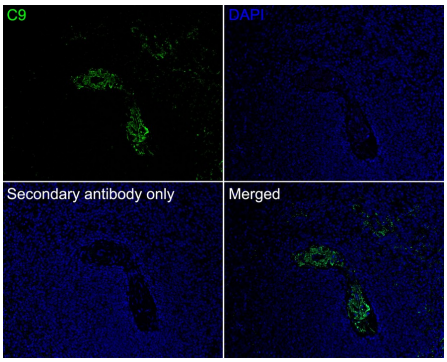

Fig5: Immunofluorescence analysis of paraffin-embedded human spleen tissue labeling C9 with Rabbit anti-C9 antibody (HA722136) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS, and then probed with the primary antibody (HA722136, green) at 1/200 dilution overnight at 4 ℃, washed with PBS. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. Nuclei were counterstained with DAPI (blue).

Background References

1. McMahon O et al. The rare C9 P167S risk variant for age-related macular degeneration increases polymerization of the terminal component of the complement cascade. Hum Mol Genet. 2021 Jun
2. Wang J et al. Cloning, expression profile of the complement component C9 gene and influence of the recombinant C9 protein on peripheral mononuclear leukocytes transcriptome in half-smooth tongue sole (Cynoglossus semilaevis). Fish Shellfish Immunol. 2020 Sep