abcam

Product datasheet

Anti-C9 antibody [53] ab17931

4 References 2 Images

Overview

Product name	Anti-C9 antibody [53]
Description	Mouse monoclonal [53] to C9
Host species	Mouse
Tested applications	**Suitable for:** ELISA, WB, Flow Cyt, IHC-P
Species reactivity	**Reacts with:** Human
Immunogen	Purified, full length native human complement factor C9 protein.
General notes	ab17931 recognizes C9 in human serum diluted 1:50 in Tris buffer (20 mM Tris-base, 1 mM MgCl2, 1 mM CaCl2 and 140 mM NaCl) and incubated for 2 hours at 37°C using a human IgM coated (10 µg/mL overnight at 4°C, blocked with PBS 7.2 + 1% BSA for 1 hour). The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.097% Sodium azide Constituents: 0.0268% PBS, 0.754% Sodium chloride
Purity	Protein G purified
Purification notes	Protein A/G purified.
Primary antibody notes	ab17931 recognizes C9 in human serum diluted 1:50 in Tris buffer (20 mM Tris-base, 1 mM MgCl2, 1 mM CaCl2 and 140 mM NaCl) and incubated for 2 hours at 37°C using a human IgM coated (10 µg/mL overnight at 4°C, blocked with PBS 7.2 + 1% BSA for 1 hour) ELISA plate.
Clonality	Monoclonal

Clone number	53
Myeloma	Sp2
Isotype	IgG1
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab17931 in the following tested applications.

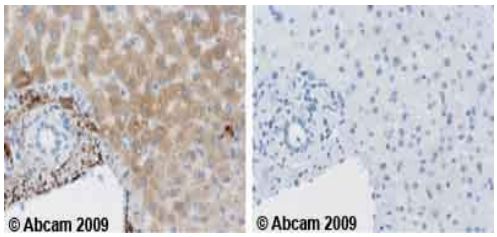
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ELISA		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 63 kDa. PubMed: 20707004
Flow Cyt		Use 1µg for 10^6 cells. **ab170190** - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
IHC-P		Use a concentration of 2 µg/ml.

Target

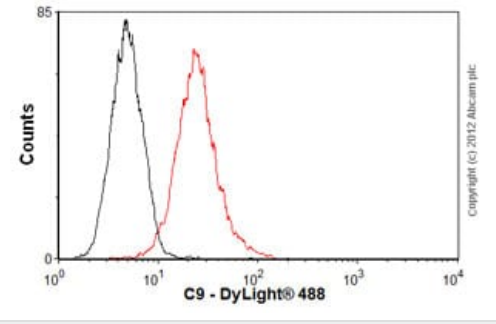
Function	Constituent of the membrane attack complex (MAC) that plays a key role in the innate and adaptive immune response by forming pores in the plasma membrane of target cells. C9 is the pore-forming subunit of the MAC.
Tissue specificity	Plasma.
Involvement in disease	Defects in C9 are a cause of complement component 9 deficiency (C9D) [MIM:613825]. A rare defect of the complement classical pathway associated with susceptibility to severe recurrent infections, predominantly by Neisseria gonorrhoeae or Neisseria meningitidis.
Sequence similarities	Belongs to the complement C6/C7/C8/C9 family. Contains 1 EGF-like domain. Contains 1 LDL-receptor class A domain. Contains 1 MACPF domain. Contains 1 TSP type-1 domain.
Post-translational modifications	Thrombin cleaves factor C9 to produce C9a and C9b. Phosphorylation sites are present in the extracelllular medium.
Cellular localization	Secreted. Cell membrane. Secreted as soluble monomer. Oligomerizes at target membranes, forming a pre-pore. A conformation change then leads to the formation of a 100 Angstrom diameter pore.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-C9 antibody [53] (ab17931)

Ab17931 staining human normal liver. Staining is localized to the cytoplasm.
Left panel: with primary antibody at 2 ug/ml. Right panel: isotype control.
Sections were stained using an automated system DAKO Autostainer Plus , at room temperature. Sections were rehydrated and antigen retrieved with the Dako 3-in-1 AR buffer, EDTA pH 9.0 in a DAKO PT Link. Slides were peroxidase blocked in 3% H2O2 in methanol for 10 minutes. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 minutes and detected with Dako Envision Flex amplification kit for 30 minutes. Colorimetric detection was completed with Diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight incubation), and amplification may be required.



Flow Cytometry - Anti-C9 antibody [53] (ab17931)

Overlay histogram showing HeLa cells stained with ab17931 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab17931, 1µg/1x10^6 cells) for 30 min at 22ºC. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22ºC. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (**ab91353**, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed.

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