abcam

Product datasheet

Anti-Factor Hantibody [EPR6225] ab133536



Recombinant RabMAb

1 References 5 Images

Overview

Product name Anti-Factor H antibody [EPR6225]

Rabbit monoclonal [EPR6225] to Factor H **Description**

Host species Rabbit

Tested applications Suitable for: WB

Unsuitable for: IHC-P or IP

Species reactivity Reacts with: Human

Immunogen Synthetic peptide within Human Factor H aa 150-250. The exact sequence is proprietary.

Positive control WB: A549 and HaCaT cell lysates; Human plasma, kidney, fetal lung, and fetal liver lysates;

Purified Factor H protein.

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

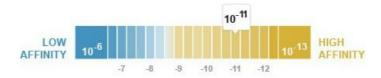
these species. Please contact us for more information.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

 $K_D = 9.40 \times 10^{-11} M$ Dissociation constant (K_D)



Learn more about K_D

Storage buffer pH: 7.2

Preservative: 0.05% Sodium azide

Constituents: 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture

supernatant

Purity Protein A purified

ClonalityMonoclonalClone numberEPR6225

Isotype IgG

Applications

The Abpromise quarantee

Our **Abpromise guarantee** covers the use of ab133536 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
WB		1/1000 - 1/10000. Detects a band of approximately 180 kDa (predicted molecular weight: 139 kDa).

Application notes Is unsuitable for IHC-P or IP.

Target

Function

Factor H functions as a cofactor in the inactivation of C3b by factor I and also increases the rate of dissociation of the C3bBb complex (C3 convertase) and the (C3b)NBB complex (C5 convertase) in the alternative complement pathway.

Tissue specificity

Involvement in disease

Expressed by the liver and secreted in plasma.

Genetic variations in CFH are associated with basal laminar drusen (BLD) [MIM:126700]; also known as drusen of Bruch membrane or cuticular drusen or grouped early adult-onset drusen. Drusen are extracellular deposits that accumulate below the retinal pigment epithelium on Bruch membrane. Basal laminar drusen refers to an early adult-onset drusen phenotype that shows a pattern of uniform small, slightly raised yellow subretinal nodules randomly scattered in the macula. In later stages, these drusen often become more numerous, with clustered groups of drusen scattered throughout the retina. In time these small basal laminar drusen may expand and ultimately lead to a serous pigment epithelial detachment of the macula that may result in vision loss.

Defects in CFH are the cause of complement factor H deficiency (CFH deficiency) [MIM:609814]. CFH deficiency determines uncontrolled activation of the alternative complement pathway with consumption of C3 and often other terminal complement components. It is associated with a number of renal diseases with variable clinical presentation and progression, including membranoproliferative glomerulonephritis and atypical hemolytic uremic syndrome. CFH deficiency patients may show increased susceptibility to meningococcal infections.

Defects in CFH are a cause of susceptibility to hemolytic uremic syndrome atypical type 1 (AHUS1) [MIM:235400]. An atypical form of hemolytic uremic syndrome. It is a complex genetic disease characterized by microangiopathic hemolytic anemia, thrombocytopenia, renal failure and absence of episodes of enterocolitis and diarrhea. In contrast to typical hemolytic uremic

syndrome, atypical forms have a poorer prognosis, with higher death rates and frequent progression to end-stage renal disease. Note=Susceptibility to the development of atypical hemolytic uremic syndrome can be conferred by mutations in various components of or regulatory factors in the complement cascade system. Other genes may play a role in modifying the phenotype.

Genetic variation in CFH is associated with age-related macular degeneration type 4 (ARMD4) [MIM:610698]. ARMD is a multifactorial eye disease and the most common cause of irreversible vision loss in the developed world. In most patients, the disease is manifest as ophthalmoscopically visible yellowish accumulations of protein and lipid (known as drusen) that lie beneath the retinal pigment epithelium and within an elastin-containing structure known as Bruch membrane.

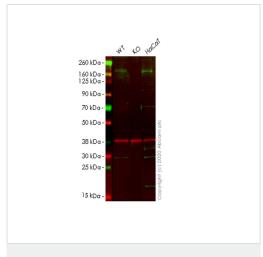
Sequence similarities

Contains 20 Sushi (CCP/SCR) domains.

Cellular localization

Secreted.

Images



Western blot - Anti-Factor H antibody [EPR6225] (ab133536)

All lanes : Anti-Factor H antibody [EPR6225] (ab133536) at 1/1000 dilution

Lane 1: Wild-type A549 cell lysate

Lane 2: CFH knockout A549 cell lysate

Lane 3: HaCaT cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (<u>ab216773</u>) at 1/10000 dilution

Predicted band size: 139 kDa
Observed band size: 180 kDa

Lanes 1-3: Merged signal (red and green). Green - ab133536 observed at 180 kDa. Red - loading control **ab8245** observed at 36 kDa.

ab133536 Anti-Factor H antibody [EPR6225] was shown to specifically react with Factor H in wild-type A549 cells. Loss of signal was observed when knockout cell line ab267031 (knockout cell lysate ab257150) was used. Wild-type and Factor H knockout samples were subjected to SDS-PAGE. ab133536 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L

(IRDye® 800CW) preadsorbed (<u>ab216773</u>) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

1 2
260 kDa —
160 kDa —
125 kDa —
90 kDa —
70 kDa —
38 kDa —
30 kDa —
25 kDa —
15 kDa —
15 kDa —

Western blot - Anti-Factor H antibody [EPR6225] (ab133536)

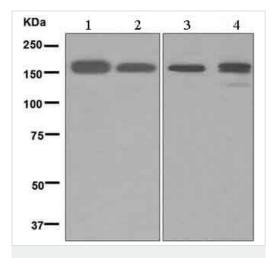
All lanes : Anti-Factor H antibody [EPR6225] (ab133536) at 1/1000 dilution

Lane 1 : Purified Factor H protein at 0.5 μg **Lane 2 :** Purified Factor H protein at 0.1 μg

Performed under reducing conditions.

Predicted band size: 139 kDa **Observed band size:** 170 kDa

This blot was produced using a 4-12% Bis-tris under the MOPS buffer system. The gel was run at 200V for 55 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 3% milk before being incubated with ab133536 overnight at 4°C at a 1/1000 dilution. Antibody binding was detected using Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Factor H antibody [EPR6225] (ab133536)

All lanes : Anti-Factor H antibody [EPR6225] (ab133536) at 1/1000 dilution

Lane 1: Human plasma lysate

Lane 2: Human kidney lysate

Lane 3: Human fetal lung lysate

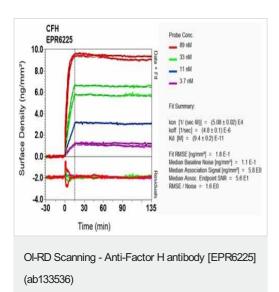
Lane 4: Human fetal liver lysate

Lysates/proteins at 10 µg per lane.

Secondary

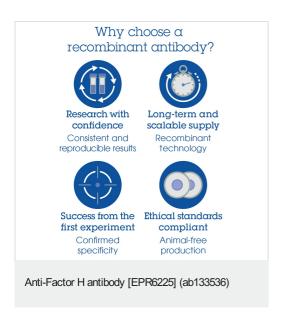
All lanes: HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 139 kDa **Observed band size:** 180 kDa



Equilibrium disassociation constant (K_D) Learn more about K_D

Click here to learn more about K_D



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