abcam

Product datasheet

Human Factor H ELISA Kit ab137975

4 References 4 Images

Overview

Product name Human Factor H ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Overall				4.8%

Inter-assay

Sample	n	Mean	SD	CV%
Overall				8.9%

Sample type Cell culture supernatant, Saliva, Milk, Urine, Serum, Plasma, Cerebral Spinal Fluid

Assay type Sandwich (quantitative)

Sensitivity 0.14 ng/ml

Range 1.125 ng/ml - 9 ng/ml

Recovery 97 %

Assay time 4h 00m

Assay duration Multiple steps standard assay

Species reactivity **Reacts with:** Human

Product overview Abcam's Factor H Human *in vitro* ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the quantitative measurement of Human Factor H in urine, saliva, milk, plasma, serum, cerebrospinal fluid and cell culture supernatants.

A Factor H specific antibody has been precoated onto 96-well plates and blocked. Standards or test samples are added to the wells and subsequently a Factor H specific biotinylated detection antibody is added and then followed by washing with wash buffer. Streptavidin-Peroxidase Conjugate is added and unbound conjugates are washed away with wash buffer. TMB is then used to visualize Streptavidin-Peroxidase enzymatic reaction. TMB is catalyzed by Streptavidin-Peroxidase to produce a blue color product that changes into yellow after adding acidic stop solution. The density of yellow coloration is directly proportional to the amount of Factor H captured in plate.

The entire kit may be stored at -20°C for long term storage before reconstitution - Avoid repeated freeze-thaw cycles.

Platform Microplate

Properties

Storage instructions Store at -20°C. Please refer to protocols.

Components	1 x 96 tests
100X Streptavidin-Peroxidase Conjugate	1 x 80µl
10X Diluent M Concentrate	1 x 30ml
20X Wash Buffer Concentrate	2 x 30ml
50X Biotinylated Human Factor H Antibody	1 x 120µl
Chromogen Substrate	1 x 7ml
Factor H Microplate (12 x 8 well strips)	1 unit
Factor H Standard	1 vial
Sealing Tapes	3 units
Stop Solution	1 x 11ml

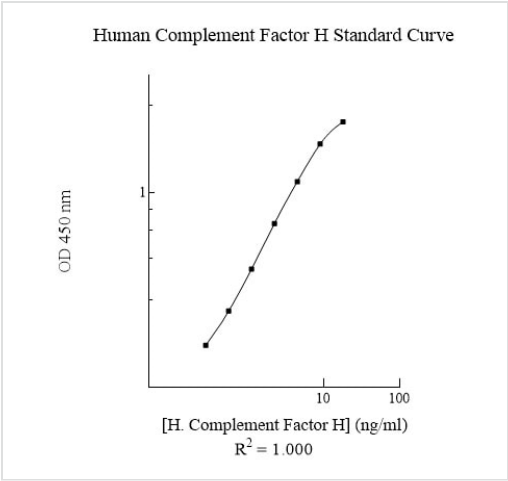
Function Factor H functions as a cofactor in the inactivation of C3b by factor I and also increases the rate of dissociation of the C3bBb complex (C3 convertase) and the (C3b)NBB complex (C5 convertase) in the alternative complement pathway.

Tissue specificity Expressed by the liver and secreted in plasma.

Involvement in disease 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

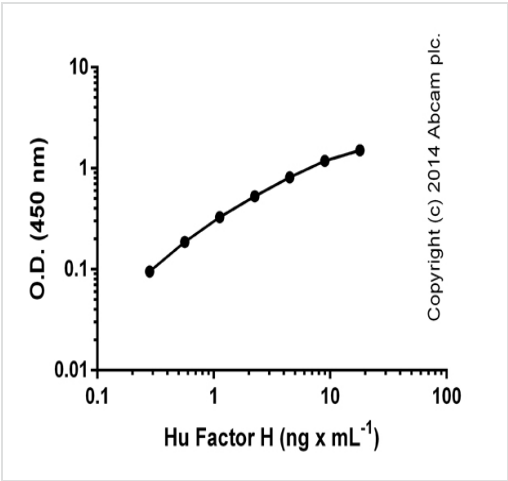
	disease characterized by microangiopathic hemolytic anemia, thrombocytopenia, renal failure and absence of episodes of enterocolitis and diarrhea. In contrast to typical hemolytic uremic syndrome, atypical forms have a poorer prognosis, with higher death rates and frequent progression to end-stage renal 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



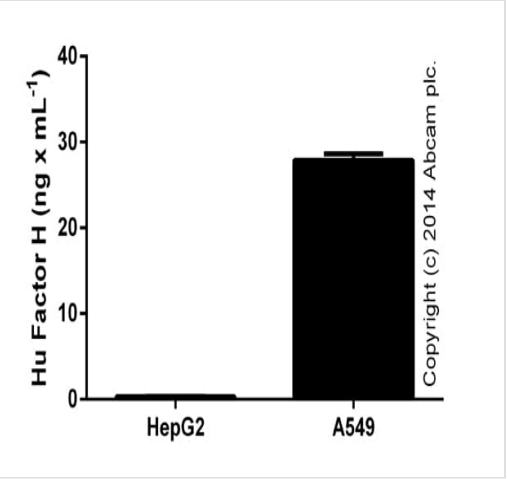
human

Representative Standard Curve using ab137975



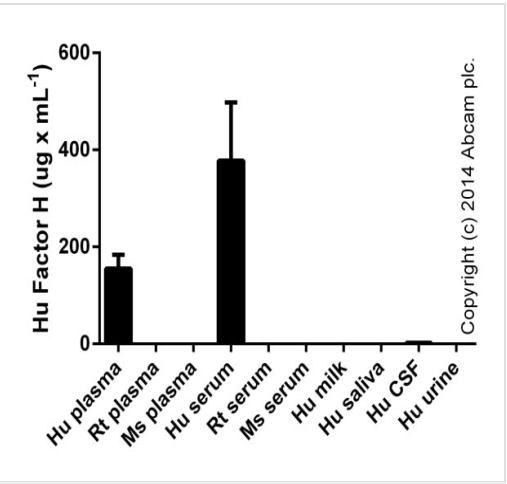
ELISA: Factor H Human ELISA Kit (ab137975)

Standard curve with background signal subtracted (duplicates; +/- SD).



ELISA: Factor H Human ELISA Kit (ab137975)

Factor H measured in culture supernatants (tested at dilution range 1/1-1/30; duplicates +/- SD).



ELISA: Factor H Human ELISA Kit (ab137975)

Factor H measured in biological fluids (duplicates +/- SD). Human serum and plasma were tested at dilution range of 1/50000-1/1500000. Other bilogical fluids were tested at 1/1-1/500 and gave measurable values (milk: 400, saliva: 200, CSF: 2000 and urine: 40 ng per mL).

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