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CFH Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP10942c

Specification

CFH Antibody (Center) Blocking peptide - Product Information

Primary Accession P08603

CFH Antibody (Center) Blocking peptide - Additional Information

Gene ID 3075

Other Names
Complement factor H, H factor 1, CFH, HF, HF1, HF2

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CFH Antibody (Center) Blocking peptide - Protein Information

Name CFH

Synonyms HF, HF1, HF2

Function
Glycoprotein that plays an essential role in maintaining a well-balanced immune response by modulating complement activation. Acts as a soluble inhibitor of complement, where its binding to self markers such as glycan structures prevents complement activation and amplification on cell surfaces (PubMed:21285368, PubMed:25402769). Accelerates the decay of the complement alternative pathway (AP) C3 convertase C3bBb, thus preventing local formation of more C3b, the central player of the complement amplification loop (PubMed:19503104, PubMed:26700768). As a cofactor of the serine protease factor I, CFH also regulates proteolytic degradation of already-deposited C3b (PubMed:23332154, PubMed:18252712, PubMed:28671664). In addition, mediates several cellular responses through interaction with specific receptors. For example, interacts with CR3/ITGAM receptor and thereby mediates the adhesion of human neutrophils to

different pathogens. In turn, these pathogens are phagocytosed and destroyed (PubMed:9558116, PubMed:20008295).

Cellular Location
Secreted.

Tissue Location
Expressed in the retinal pigment epithelium (at protein level) (PubMed:25136834). CFH is one of the most abundant complement components in blood where the liver is the major source of CFH protein in vivo. in addition, CFH is secreted by additional cell types including monocytes, fibroblasts, or endothelial cells (PubMed:6444659, PubMed:2968404, PubMed:2139673, PubMed:25136834)

CFH Antibody (Center) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

CFH Antibody (Center) Blocking peptide - Images

CFH Antibody (Center) Blocking peptide - Background

This gene is a member of the Regulator of ComplementActivation (RCA) gene cluster and encodes a protein with twentyshort concensus repeat (SCR) domains. This protein is secreted intothe bloodstream and has an essential role in the regulation ofcomplement activation, restricting this innate defense mechanism tomicrobial infections. Mutations in this gene have been associatedwith hemolytic-uremic syndrome (HUS) and chronic hypocomplementemicnephropathy. Alternate transcriptional splice variants, encodingdifferent isoforms, have been characterized.

CFH Antibody (Center) Blocking peptide - References

Dieterich, R., et al. Infect. Immun. 78(11):4467-4476(2010)Sofat, R., et al. Atherosclerosis 213(1):184-190(2010)Davila, S., et al. Nat. Genet. 42(9):772-776(2010)Scambi, C., et al. PLoS ONE 5 (8), E12162 (2010) :Bunkenborg, J., et al. Proteomics 4(2):454-465(2004)