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Goat Anti-Complement factor H Antibody
Peptide-affinity purified goat antibody
Catalog # AF1264a

Specification

Goat Anti-Complement factor H Antibody - Product Information

Application	**WB, E**
Primary Accession	P08603
Other Accession	NP_000177, 3075
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**139096**

Goat Anti-Complement factor H Antibody - Additional Information

Gene ID 3075

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

Dilution
WB~~1:1000
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-Complement factor H Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-Complement factor H Antibody - 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:21317894, 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:21317894, PubMed:26700768). As a cofactor of the serine protease factor I, CFH also regulates proteolytic degradation of already-deposited C3b (PubMed:18252712, PubMed:23332154, 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:20008295, PubMed:9558116).

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:2139673, PubMed:25136834, PubMed:2968404, PubMed:6444659)

Goat Anti-Complement factor H Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-Complement factor H Antibody - Images

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AF1264a staining (0.03 µg/ml) of human lung lysate (RIPA buffer, 35 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

Goat Anti-Complement factor H Antibody - Background

This gene is a member of the Regulator of Complement Activation (RCA) gene cluster and encodes a protein with twenty short concensus repeat (SCR) domains. This protein is secreted into the bloodstream and has an essential role in the regulation of complement activation, restricting this innate defense mechanism to microbial infections. Mutations in this gene have been associated with hemolytic-uremic syndrome (HUS) and chronic hypocomplementemic nephropathy. Alternate transcriptional splice variants, encoding different isoforms, have been characterized.

Goat Anti-Complement factor H Antibody - References

Genetic variation in complement factor H and risk of coronary heart disease: Eight new studies and a meta-analysis of around 48,000 individuals. Sofat R, et al. Atherosclerosis, 2010 Jul 29. PMID 20708732.
Genome-wide association study identifies variants in the CFH region associated with host susceptibility to meningococcal disease. Davila S, et al. Nat Genet, 2010 Sep. PMID 20694013.
Joint Effect of Cigarette Smoking, CFH and LOC387715/HTRA1 Polymorphisms on Polypoidal Choroidal Vasculopathy. Nakanishi H, et al. Invest Ophthalmol Vis Sci, 2010 Aug 4. PMID 20688737.
Complement Factor H and High-Temperature Requirement A-1 Genotypes and Treatment Response of Age-related Macular Degeneration. Tsuchihashi T, et al. Ophthalmology, 2010 Jul 31. PMID 20678803.
R102G polymorphism of the C3 gene associated with exudative age-related macular degeneration in a French population. Zerbib J, et al. Mol Vis, 2010 Jul 15. PMID 20664795.