

Factor H (OX24): sc-53067

BACKGROUND

The Factor H gene family is a multidomain, multifunctional protein family whose individual members are defined by conserved structural elements, which display diverse yet often overlapping functions. These proteins share a common structural motif, the short consensus repeat (SCR), which is structurally conserved among related genes and between phylogenetically divergent species. The human complement Factor H (FH, CFH, HUS, β -1H) gene encodes a 1,213 amino acid serum glycoprotein which is arranged into 20 SCRs, each comprising approximately 60 amino acids and an 18-residue leader sequence. Factor H controls the function of the alternative complement pathway and acts as a cofactor with Factor I (C3b inactivator). In addition, Factor H has functional activity outside of the complement system, where it can bind to the cellular integrin receptor (CD11b/CD18), interact with cell surface glycosaminoglycans and associate with the surface of certain pathogenic microorganisms. Deficiency in Factor H is a common characteristic of acute renal disease.

CHROMOSOMAL LOCATION

Genetic locus: CFH (human) mapping to 1q31.3.

SOURCE

Factor H (OX24) is a mouse monoclonal antibody raised against purified complement Factor H of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Factor H (OX24) is available conjugated to either phycoerythrin (sc-53067 PE) or fluorescein (sc-53067 FITC), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Factor H (OX24) is recommended for detection of serum complement protein Factor H (155 kDa) as well as a 43-49 kDa truncated form of Factor H of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 μ g per 1 x 10⁶ cells).

Suitable for use as control antibody for Factor H siRNA (h): sc-42877, Factor H shRNA Plasmid (h): sc-42877-SH and Factor H shRNA (h) Lentiviral Particles: sc-42877-V.

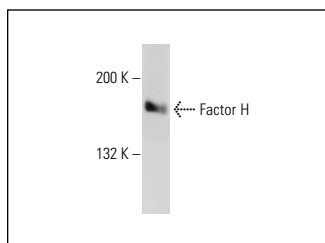
Molecular Weight of Factor H: 150 kDa.

Positive Controls: human plasma extract: sc-364374.

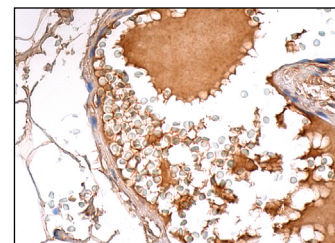
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Factor H (OX24): sc-53067. Western blot analysis of human recombinant Factor H.



Factor H (OX24): sc-53067. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing extracellular staining.

SELECT PRODUCT CITATIONS

- Blanc, C., et al. 2012. Overall neutralization of complement Factor H by autoantibodies in the acute phase of the autoimmune form of atypical hemolytic uremic syndrome. *J. Immunol.* 189: 3528-3537.
- Chen, A. and Seifert, H.S. 2013. Structure-function studies of the *Neisseria gonorrhoeae* major outer membrane porin. *Infect. Immun.* 81: 4383-4391.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

CONJUGATES

See **Factor H (C18/3): sc-47685** for Factor H antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.