



FHR-1 (M-20): sc-17954

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, beta-1H) gene encodes a 1213 amino acid serum glycoprotein, which is arranged into 20 SCRs, each approximately 60 amino acids long and an 18-residue leader sequence. Four factor H-related proteins have been identified that are coded by 4 genes, FHR1, FHR2, FHR3, and FHR4, which are all closely linked to the Factor H gene on chromosome 1q31-q32.1. FHR-1, along with FHR-2 and FHR-4, are constituents of lipoproteins, while FHR-3 interacts with heparin.

REFERENCES

1. Ripoche, J., et al. 1988. The complete amino acid sequence of human complement factor H. *Biochem. J.* 249: 593-602.
2. Zipfel, P.F., et al. 1999. The factor H protein family. *Immuno.* 42: 53-60.
3. Male, D.A., et al. 2000. Complement factor H: sequence analysis of 221 kb of human genomic DNA containing the entire fH, fHR-1 and fHR-3 genes. *Mol. Immunol.* 37: 41-52.
4. Diaz-Guillen, M.A., et al. 1999. A radiation hybrid map of complement factor H and factor H-related genes. *Immunogenetics* 49: 549-552.
5. Online Mendelian Inheritance in Man, OMIM (TM). Johns Hopkins University, Baltimore, MD. MIM Number: 134371: 10/13/2000: World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

SOURCE

FHR-1 (M-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of FHR-1 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-17954 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FHR-1 (M-20) is recommended for detection of FHR-1 and to a lesser extent, Factor H of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

STORAGE

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

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

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