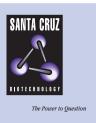
SANTA CRUZ BIOTECHNOLOGY, INC.

FHR-5 (S-12): sc-104240



BACKGROUND

The Factor H gene family is a multidomain, multifunctional protein family whose individual members are defined by conserved structural elements and 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. Five Factor H-related proteins, FHR-1–5, have been identified. All five are closely linked to the Factor H gene on chromosome 1q31.3. FHR-5, which is synthesized in the liver and contains nine SCRs, co-localizes with complement deposits, suggesting a role in complement regulation or localization. FHR-5 also has been shown to associate with high density lipid lipoprotein complexes in human plasma, indicating a role for FHR-5 independent of its complement-regulatory activity.

REFERENCES

- 1. Díaz-Guillen, M.A., Rodríguez de Córdoba, S. and Heine-Suñer, D. 1999. A radiation hybrid map of complement Factor H and Factor H-related genes. Immunogenetics 49: 549-552.
- 2. Zipfel, P.F., Jokiranta, T.S., Hellwage, J., Koistinen, V. and Meri, S. 1999. The Factor H protein family. Immunopharmacology 42: 53-60.
- Male, D.A., Ormsby, R.J., Ranganathan, S., Giannakis, E. and Gordon, D.L. 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. Närkiö-Mäkelä, M., Hellwage, J., Tahkokallio, O. and Meri, S. 2001. Complement-regulator Factor H and related proteins in otitis media with effusion. Clin. Immunol. 100: 118-126.
- McRae, J.L., Cowan, P.J., Power, D.A., Mitchelhill, K.I., Kemp, B.E., Morgan, B.P. and Murphy, B.F. 2001. Human Factor H-related protein 5 (FHR-5). A new complement-associated protein. J. Biol. Chem. 276: 6747-6754.
- Murphy, B., Georgiou, T., Machet, D., Hill, P. and McRae, J. 2002. Factor H-related protein-5: a novel component of human glomerular immune deposits. Am. J. Kidney Dis. 39: 24-27.
- McRae, J.L., Murphy, B.E., Eyre, H.J., Sutherland, G.R., Crawford, J. and Cowan, P.J. 2002. Location and structure of the human FHR-5 gene. Genetica 114: 157-161.
- McRae, J.L., Duthy, T.G., Griggs, K.M., Ormsby, R.J., Cowan, P.J., Cromer, B.A., McKinstry, W.J., Parker, M.W., Murphy, B.F. and Gordon, D.L. 2005. Human Factor H-related protein 5 has cofactor activity, inhibits C3 convertase activity, binds heparin and C-reactive protein, and associates with lipoprotein. J. Immunol. 174: 6250-6256.

CHROMOSOMAL LOCATION

Genetic locus: CFHR5 (human) mapping to 1q31.3.

SOURCE

FHR-5 (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FHR-5 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-104240 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FHR-5 (S-12) is recommended for detection of FHR-5 of human 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); non cross-reactive with other FHR family members.

Suitable for use as control antibody for FHR-5 siRNA (h): sc-88729, FHR-5 shRNA Plasmid (h): sc-88729-SH and FHR-5 shRNA (h) Lentiviral Particles: sc-88729-V.

Molecular Weight of FHR-5: 65 kDa.

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) Immunofluo-rescence: use donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

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.