



FcRH4 (C-15): sc-46957

BACKGROUND

The Fc receptor homolog (FcRH) family of proteins are related to the classical Fc receptors (FcR) and belong to the immunoglobulin receptor superfamily. The proteins in the FcRH family are type I transmembrane glycoproteins and consist of FcRH1-FcRH6. The gene encoding for the proteins maps to human chromosome 1. The FcRH proteins, which are involved in immune system regulation, have immunoreceptor-tyrosine inhibitory motifs in their cytoplasmic domains. Mutations in the gene encoding for the FcRH proteins may be associated with systemic lupus erythematosus, autoimmune thyroid disease and rheumatoid arthritis. The FcRH genes are expressed primarily, although not exclusively, by mature B lineage cells, and may serve important regulatory roles in normal and neoplastic B cell development.

REFERENCES

1. Davis, R.S., Wang, Y.H., Kubagawa, H. and Cooper, M.D. 2001. Identification of a family of Fc receptor homologs with preferential B cell expression. *Proc. Natl. Acad. Sci. USA* 98: 9772-9777.
2. Ehrhardt, G.R., Davis, R.S., Hsu, J.T., Leu, C.M., Ehrhardt, A. and Cooper, M.D. 2003. The inhibitory potential of Fc receptor homolog 4 on memory B cells. *Proc. Natl. Acad. Sci. USA* 100: 13489-13494.
3. Davis, R.S., Stephan, R.P., Chen, C.C., Dennis, G., Jr. and Cooper, M.D. 2004. Differential B cell expression of mouse Fc receptor homologs. *Int. Immunol.* 16: 1343-1353.
4. Davis, R.S., Ehrhardt, G.R., Leu, C.M., Hirano, M., Cooper, M.D. 2005. An extended family of Fc receptor relatives. *Eur. J. Immunol.* 35: 674-680.

CHROMOSOMAL LOCATION

Genetic locus: FCRL4 (human) mapping to 1q21.

SOURCE

FcRH4 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of FcRH4 of human 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-46957 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO 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.

APPLICATIONS

FcRH4 (C-15) is recommended for detection of FcRH4 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for FcRH4 siRNA (h): sc-60629.

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.