

FcRH3 (E-14): sc-46594

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 FcRH 1-FcRH6. The gene encoding for the proteins maps on chromosome 1q21-22, near its FcR relatives. 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 FcRH proteins may be associated with systemic lupus erythematosus, autoimmune thyroid disease and rheumatoid arthritis. The highly restricted pattern of mouse FcRH3 expression suggests this member of the phylogenetically conserved FcRH family may have an important immunoregulatory role in marginal zone B cells.

REFERENCES

1. Davis, R.S., et al. 2001. Identification of a family of Fc receptor homologs with preferential B cell expression. *Proc. Natl. Acad. Sci. USA* 98: 9772-9777.
2. Davis, R.S., et al. 2002. Fc receptor homologs: newest members of a remarkably diverse Fc receptor gene family. *Immunol. Rev.* 190: 123-136.
3. Ehrhardt, G.R., et al. 2003. The inhibitory potential of Fc receptor homolog 4 on memory B cells. *Proc. Natl. Acad. Sci. USA* 100: 13489-13494.
4. Davis, R.S., et al. 2004. Differential B cell expression of mouse Fc receptor homologs. *Int. Immunol.* 16: 1343-1353.
5. Davis, R.S., et al. 2005. An extended family of Fc receptor relatives. *Eur. J. Immunol.* 35: 674-680.

CHROMOSOMAL LOCATION

Genetic locus: FCRL5 (human) mapping to 1q21.

SOURCE

FcRH3 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of FcRH3 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-46594 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.

PROTOCOLS

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

APPLICATIONS

FcRH3 (E-14) is recommended for detection of FcRH3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1–2 µg per 100–500 µg of total protein (1 ml of cell lysate)], 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).

Suitable for use as control antibody for FcRH3 siRNA (h): sc-45791, FcRH3 shRNA Plasmid (h): sc-45791-SH and FcRH3 shRNA (h) Lentiviral Particles: sc-45791-V.

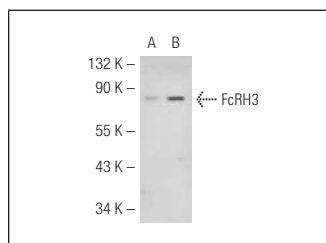
Molecular Weight of FcRH3: 92 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, THP-1 cell lysate: sc-2238 or U-937 cell lysate: sc-2239.

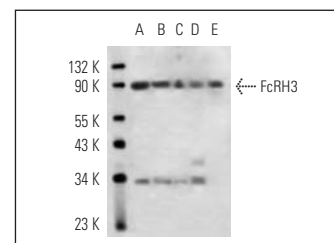
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



FcRH3 (E-14): sc-46594. Western blot analysis of FcRH3 expression in non-transfected: sc-117752 (A) and human FcRH3 transfected: sc-173229 (B) 293T whole cell lysates.



FcRH3 (E-14): sc-46594. Western blot analysis of FcRH3 expression in K-562 (A), Raji (B), THP-1 (C), U-937 (D) and HL-60 (E) whole cell lysates.

RESEARCH USE

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