

# FcRH1 (N-13): sc-46324

## 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 on chromosome 1(q21-22), 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 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., 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 (FcRH1-5) extend the Fc receptor family. *Curr. Top. Microbiol. Immunol.* 266: 85-112.
3. Davis, R.S., et al. 2002. Fc receptor homologs: newest members of a remarkably diverse Fc receptor gene family. *Immunol. Rev.* 190: 123-136.
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.
6. Leu, C.M., et al. 2005. FcRH1: an activation co-receptor on human B cells. *Blood* 105: 1121-1126.

## CHROMOSOMAL LOCATION

Genetic locus: FCRL1 (human) mapping to 1q23.1.

## SOURCE

FcRH1 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of FcRH1 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-46324 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.

## APPLICATIONS

FcRH1 (N-13) is recommended for detection of FcRH1 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); may cross-react with FcRH2.

Suitable for use as control antibody for FcRH1 siRNA (h): sc-45628, FcRH1 shRNA Plasmid (h): sc-45628-SH and FcRH1 shRNA (h) Lentiviral Particles: sc-45628-V.

Molecular Weight of FcRH1 (calculated): 47 kDa.

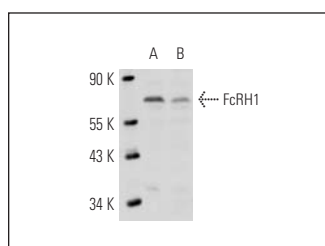
Molecular Weight of FcRH1 (observed): 71 kDa.

Positive Controls: Ramos cell lysate: sc-2216, Raji cell lysate or K-562 whole cell lysate: sc-2203.

## 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



FcRH1 (N-13): sc-46324. Western blot analysis of FcRH1 expression in Ramos (A) and Raji (B) whole cell lysates.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.