



## Fcrls (K-14): sc-46587

### 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 (namely FcRH1-FcRH6) are type I transmembrane glycoproteins that are involved in immune system regulation and have immunoreceptor-tyrosine inhibitory motifs in their cytoplasmic domains. FcRH proteins are expressed primarily, although not exclusively, by mature B lineage cells, and may also serve important regulatory roles in normal and neoplastic B cell development. Fcrls (Fc receptor-like S), also known as IgSR, Msr2, Fcrh2, IFGP2, MMAN-g, FcRH2sc or moFcRH2sc, is a 509 amino acid mouse protein that is related to the human FcRH family. The mouse ortholog of human FcRH2, Fcrls is expressed in non-lymphoid tissues and may play a role in developmental regulation events throughout the cell.

### 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. 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.
5. Davis, R.S., et al. 2004. Differential B cell expression of mouse Fc receptor homologs. *Int. Immunol.* 16: 1343-1353.
6. Davis, R.S., et al. 2005. An extended family of Fc receptor relatives. *Eur. J. Immunol.* 35: 674-680.
7. Wilson, T.J., et al. 2007. Fcrl6, a new ITIM-bearing receptor on cytolytic cells, is broadly expressed by lymphocytes following HIV-1 infection. *Blood* 109: 3786-3793.
8. Taylor, A.I., et al. 2007. The first avian Ig-like Fc receptor family member combines features of mammalian FcR and Fcrl. *Immunogenetics* 59: 323-328.

### CHROMOSOMAL LOCATION

Genetic locus: Fcrls (mouse) mapping to 3 F1.

### SOURCE

Fcrls (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Fcrls 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-46587 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

Fcrls (K-14) is recommended for detection of Fcrls of mouse 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).

Suitable for use as control antibody for Fcrls siRNA (m): sc-45687.

Molecular Weight of Fcrls: 64 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) 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.

### 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](http://www.scbt.com) or our catalog for detailed protocols and support products.