## SANTA CRUZ BIOTECHNOLOGY, INC.

# FcRH2 (K-13): sc-46586



The Power to Question

## 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, 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

- 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.
- Davis, R.S., et al. 2002. Fc receptor homologs (FcRH1-5) extend the Fc receptor family. Curr. Top. Microbiol. Immunol. 266: 85-112.
- 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.
- Davis, R.S., et al. 2004. Differential B cell expression of mouse Fc receptor homologs. Int. Immunol.16: 1343-1353.
- Davis, R.S., et al. 2005. An extended family of Fc receptor relatives. Eur. J. Immunol. 35: 674-680.

#### CHROMOSOMAL LOCATION

Genetic locus: FCRH2 (human) mapping to 1q21; Fcrh2 (mouse) mapping to 3 F1.

#### SOURCE

FcRH2 (K-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FcRH2 of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-46586 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **STORAGE**

Store at 4° C, \*\*D0 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

FcRH2 (K-13) is recommended for detection of FcRH2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1–2  $\mu$ g per 100–500  $\mu$ g 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).

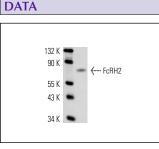
Suitable for use as control antibody for FcRH2 siRNA (h): sc-45686.

Molecular Weight of FcRH2: 64 kDa.

Positive Controls: GA-10 cell lysate.

## **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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.



FcRH2 (K-13): sc-46586. Western blot analysis of FcRH2 expression in GA-10 whole cell lysate.

## **RESEARCH USE**

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