### SANTA CRUZ BIOTECHNOLOGY, INC.

# FcRH3 (H-70): sc-66890



#### 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 1q23.1, 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 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.
- 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.
- Davis, R.S., et al. 2004. Differential B cell expression of mouse Fc receptor homologs. Int. Immunol. 16: 1343-1353.

#### CHROMOSOMAL LOCATION

Genetic locus: FCRL5 (human) mapping to 1q23.1.

#### SOURCE

FcRH3 (H-70) is a rabbit polyclonal antibody raised against amino acids 31-100 mapping near the N-terminus of FcRH3 of human origin.

#### PRODUCT

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

#### **APPLICATIONS**

FcRH3 (H-70) 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.

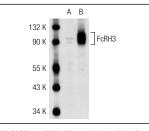
Molecular Weight of FcRH3: 92 kDa.

Positive Controls: FcRH3 (h): 293T Lysate: sc-114531, U-937 cell lysate: sc-2239 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 goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



FcRH3 (H-70): sc-66890. Western blot analysis of FcRH3 expression in non-transfected: sc-117752 (A) and human FcRH3 transfected: sc-114531 (B) 293T whole cell lysates.

#### **STORAGE**

Store at 4° C, \*\*D0 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.

## MONOS Satisfation Guaranteed

Try FcRH3 (C-2): sc-365706 or FcRH3 (A-12): sc-166347, our highly recommended monoclonal alternatives to FcRH3 (H-70).