

FCRLM1 (N28.1): sc-53583

BACKGROUND

FCRLM1 is a member of the Fc receptor-like (FCRL) family of molecules that may play a fundamental role as an immunomodulatory agent in conventional and subverted B lineage cells. FCRL molecules are implicated in both malignancies and autoimmune disorders. Homologous to the well-known receptors in the Fc division of immunoglobulins (FCR), Fc receptor-like molecules helped contribute many new genes to the immunoglobulin superfamily (IgSF). These genes, located on the human chromosomal region 1q21-23, also display significant diversity between humans and mice. The Fc receptor-like molecules retain dual or autonomous signaling properties, as well as diverse extracellular frameworks and preferential B lineage expression. Strong evidence does not exist for a role as Ig-binding receptors.

REFERENCES

1. Ehrhardt, G.R., Davis, R.S., Hsu, J.T., Leu, C.M., Ehrhardt, A. and Cooper, M.D. 2003. The inhibitory potential of Fc receptor homolog 4 on memory B cells. *Proc. Natl. Acad. Sci. USA* 100: 13489-13494.
2. Maltais, L.J., Lovering, R.C., Taranin, A.V., Colonna, M., Ravetch, J.V., Dalla-Favera, R., Burrows, P.D., Cooper, M.D. and Davis, R.S. 2006. New nomenclature for Fc receptor-like molecules. *Nat. Immunol.* 7: 431-432.
3. Newman, W.G., Zhang, Q., Liu, X., Walker, E., Ternan, H., Owen, J., Johnson, B., Greer, W., Mosher, D.P., Maksymowych, W.P., Bykerk, V.P., Keystone, E.C., Amos, C.I. and Siminovitch, K.A. 2006. Rheumatoid arthritis association with the FCRL3 -169C polymorphism is restricted to PTPN22 1858T-homozygous individuals in a Canadian population. *Arthritis Rheum.* 54: 3820-3827.
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CHROMOSOMAL LOCATION

Genetic locus: FCRLA (human) mapping to 1q23.3.

SOURCE

FCRLM1 (N28.1) is a mouse monoclonal antibody raised against recombinant FCRLM1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FCRLM1 (N28.1) is available conjugated to agarose (sc-53583 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53583 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53583 PE), fluorescein (sc-53583 FITC), Alexa Fluor[®] 488 (sc-53583 AF488), Alexa Fluor[®] 546 (sc-53583 AF546), Alexa Fluor[®] 594 (sc-53583 AF594) or Alexa Fluor[®] 647 (sc-53583 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-53583 AF680) or Alexa Fluor[®] 790 (sc-53583 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

FCRLM1 (N28.1) is recommended for detection of FCRLM1 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 flow cytometry (1 µg per 1 x 10⁶ cells).

Suitable for use as control antibody for FCRLM1 siRNA (h): sc-63284, FCRLM1 shRNA Plasmid (h): sc-63284-SH and FCRLM1 shRNA (h) Lentiviral Particles: sc-63284-V.

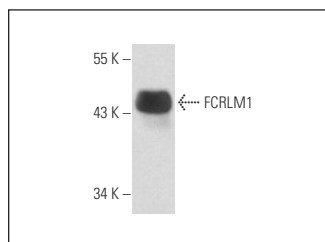
Molecular Weight of FCRLM1: 40 kDa.

Positive Controls: U-698-M whole cell lysate.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



FCRLM1 (N28.1): sc-53583. Western blot analysis of FCRLM1 expression in U-698-M whole cell lysate.

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 for detailed protocols and support products.