

CD161 (B199.2): sc-58963

BACKGROUND

Natural killer (NK) and T cells express a superfamily of proteins with structural features of C-type lectins. T cells bearing natural killer receptors (NKR) such as CD94 and CD161 are present in psoriasis. CD161 mediates NK cell activation and functions as an activating receptor. CD161 is a prototypic marker of NK cells, although it is also found on a subset of CD8⁺ T cells. The expression of NK receptors on CD8⁺ T cells can be considered a marker of cytotoxic effector T cells that are expanded *in vivo* after antigenic activation leading to extensive proliferation. The transcription, mRNA accumulation, and surface expression of CD161, a molecule involved in triggering cytotoxicity, is specifically upregulated by IL-12.

REFERENCES

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4. Garni-Wagner, B.A., et al. 1993. A novel function-associated molecule related to non-MHC-restricted cytotoxicity mediated by activated natural killer cells and T cells. *J. Immunol.* 151: 60-70.
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6. Vicari, A.P., et al. 1996. Mouse NK1.1⁺ T cells: a new family of T cells. *Immunol. Today* 17: 71-76.
7. Reichlin, A., et al. 1998. Natural killer cell proliferation induced by anti-NK1.1 and IL-2. *Immunol. Cell Biol.* 76: 143-152.
8. Poulton, L.D., et al. 2001. Cytometric and functional analyses of NK and NKT cell deficiencies in NOD mice. *Int. Immunol.* 13: 887-896.
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CHROMOSOMAL LOCATION

Genetic locus: KLRB1 (human) mapping to 12p13.31.

SOURCE

CD161 (B199.2) is a mouse monoclonal antibody raised against activated NK cells of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2b} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

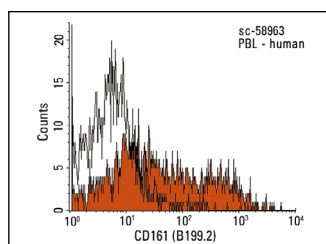
CD161 (B199.2) is recommended for detection of CD161 cell surface antigen of human origin by immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).

Suitable for use as control antibody for CD161 siRNA (h): sc-42935, CD161 shRNA Plasmid (h): sc-42935-SH and CD161 shRNA (h) Lentiviral Particles: sc-42935-V.

Molecular Weight of CD161: 25 kDa.

Positive Controls: NK-92 whole cell lysate: sc-364788.

DATA



CD161 (B199.2): sc-58963. Indirect FCM analysis of human peripheral blood leukocytes stained with CD161 (B199.2), followed by PE-conjugated goat anti-mouse IgG: sc-3738. Black line histogram represents the isotype control, normal mouse IgG_{2b}: sc-3879.

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.