# SANTA CRUZ BIOTECHNOLOGY, INC.

# CD161 (C-16): sc-70148



# 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 (NKRs) 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<sup>+</sup> T cells. The expression of NK receptors on CD8<sup>+</sup> 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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- Pospisil, M., Vannucci, L., Horvath, O., Fiserova, A., Krausova, K., Bezouska, K. and Mosca, F. 2000. Cancer immunomodulation by carbohydrate ligands for the lymphocyte receptor NKR-P1. Int. J. Oncol. 16: 267-276.
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- Tarazona, R., DelaRosa, O., Alonso, C., Ostos, B., Espejo, J., Pena, J. and Solana, R. 2000. Increased expression of NK cell markers on T lymphocytes in aging and chronic activation of the immune system reflects the accumulation of effector/senescent T cells. Mech. Ageing Dev. 121: 77-88.

# CHROMOSOMAL LOCATION

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

#### SOURCE

CD161 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal extracellular domain of CD161 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-70148 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.

# APPLICATIONS

CD161 (C-16) is recommended for detection of CD161 of human 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 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.

# **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) Immunofluo-rescence: use donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

# **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 **CD161 (HP-3G10): sc-69891**, our highly recommended monoclonal alternative to CD161 (C-16).