# SANTA CRUZ BIOTECHNOLOGY, INC.

# IL-19 (C-20): sc-16729



The Power to Question

#### BACKGROUND

IL-14 (high molecular weight B cell growth factor, or HMW-BCGF) plays a significant role in the rapid proliferation of aggressive B cell-type non-Hodgkin's lymphoma. IL-19 and IL-20 are IL-10-related cytokines; IL-19 is involved in melanoma differentiation while IL-20 plays an essential role in epidermal function and psoriasis. Like other interleukin molecules, IL-21 is a small secreted molecule with potent effects on lymphoid cells and is most closely related to IL-2 and IL-15. IL-21 has a role in the proliferation and maturation of natural killer cell populations from bone marrow, in the proliferation of mature B-cell populations co-stimulated with anti-CD40, and in the proliferation of T cells costimulated with anti-CD3.

## REFERENCES

- Ford, R., et al. 1995. Identification of B-cell growth factors (interleukin-14; high molecular weight-B-cell growth factors) in effusion fluids from patients with aggressive B-cell lymphomas. Blood 86: 283-293.
- Gallagher, G., et al. 2000. Cloning, expression and initial characterization of interleukin-19 (IL-19), a novel homologue of human interleukin-10 (IL-10). Genes Immun. 1: 442-450.
- Parrish-Novak, J., et al. 2000. Interleukin-21 and its receptor are involved in NK cell expansion and regulation of lymphocyte function. Nature 408: 57-63.
- Blumberg, H., et al. 2001. Interleukin-20: discovery, receptor identification, and role in epidermal function. Cell 104: 9-19.
- 5. Vosshenrich, C.A., et al. 2001. Cytokines: IL-21 joins the  $\gamma_c$ -dependent network? Curr. Biol. 11: R175-R177.

## CHROMOSOMAL LOCATION

Genetic locus: ZMDA1 (human) mapping to 1q32.1.

## SOURCE

IL-19 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of IL-19 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.

Blocking peptide available for competition studies, sc-16729 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **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 or our catalog for detailed protocols and support products.

#### APPLICATIONS

IL-19 (C-20) is recommended for detection of IL-19 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), immunohistochemistry (including paraffin-embedded sections) (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 IL-19 siRNA (h): sc-39659, IL-19 shRNA Plasmid (h): sc-39659-SH and IL-19 shRNA (h) Lentiviral Particles: sc-39659-V.

Molecular Weight of IL-19: 18 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) 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™ Mounting Medium: sc-24941. 4) Immuno-histochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA





IL-19 (C-20): sc-16729. Western blot analysis of human recombinant IL-19.

IL-19 (C-20): sc-16729. Immunoperoxidase staining of formalin fixed, paraffin-embedded human breast tumor showing cytoplasmic and extracellular localization.

#### SELECT PRODUCT CITATIONS

 Baluchamy, S., et al. 2010. Differential oxidative stress gene expression profile in mouse brain after proton exposure. In Vitro Cell. Dev. Biol. Anim. 46: 718-725.