

IL-20 (PL-C21): sc-134365

BACKGROUND

IL-14 (high-molecular-weight B cell growth factor or HMW-BCGF) is a 53 kDa protein that 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, and IL-20 plays an essential role in epidermal function and psoriasis. Like other interleukin molecules, IL-21 is a small secreted molecule, and it has potent effects on lymphoid cells. IL-21 is most closely related to IL-2 and IL-15 and 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 co-stimulated with anti-CD3.

REFERENCES

1. Ford, R., Tamayo, A., Martin, B., Niu, K., Claypool, K., Cabanillas, F. and Ambrus, J., Jr. 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.
2. Gallagher, G., Dickensheets, H., Eskdale, J., Izotova, L.S., Mirochnitchenko, O.V., Peat, J.D., Vazquez, N., Pestka, S., Donnelly, R.P. and Kotenko, S.V. 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.
3. Parrish-Novak, J., Dillon, S.R., Nelson, A., Hammond, A., Sprecher, C., Gross, J.A., Johnston, J., Madden, K., Xu, W., West, J., Schrader, S., Burkhead, S., Heipel, M., Brandt, C., Kuijper, J.L., Kramer, J., et al. 2000. Interleukin 21 and its receptor are involved in NK cell expansion and regulation of lymphocyte function. *Nature* 408: 57-63.
4. Blumberg, H., Conklin, D., Xu, W.F., Grossmann, A., Brender, T., Carollo, S., Eagan, M., Foster, D., Haldeman, B.A., Hammond, A., Haugen, H., Jelinek, L., Kelly, J.D., Madden, K., Maurer, M.F., Parrish-Novak, J., et al. 2001. Interleukin 20: discovery, receptor identification, and role in epidermal function. *Cell* 104: 9-19.
5. Vosshenrich, C.A. and Di, Santo, J.P. 2001. Cytokines: IL-21 joins the γ_c -dependent network? *Curr. Biol.* 11: R175-R177.

CHROMOSOMAL LOCATION

Genetic locus: IL20 (human) mapping to 1q32.1.

SOURCE

IL-20 (PL-C21) is a mouse monoclonal antibody raised against recombinant IL-20 protein of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ kappa light chain 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

IL-20 (PL-C21) is recommended for detection of IL-20 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for IL-20 siRNA (h): sc-39660, IL-20 shRNA Plasmid (h): sc-39660-SH and IL-20 shRNA (h) Lentiviral Particles: sc-39660-V.

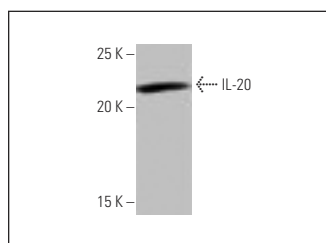
Molecular Weight of IL-20: 19 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203 or A-431 whole cell lysate: sc-2201.

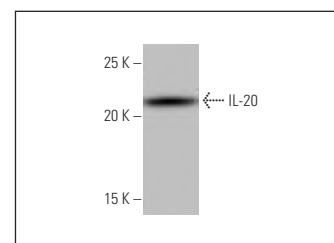
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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).

DATA



IL-20 (PL-C21): sc-134365. Western blot analysis of IL-20 expression in A-431 whole cell lysate.



IL-20 (PL-C21): sc-134365. Western blot analysis of IL-20 expression in K-562 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Wu, J., Wang, G., Hao, J. and Gong, W. 2014. The correlation between IL-20 and the Th2 immune response in human asthma. *Asian Pac. J. Allergy Immunol.* 32: 316-320.
2. Su, C.H., Lin, I.H., Tzeng, T.Y., Hsieh, W.T. and Hsu, M.T. 2016. Regulation of IL-20 expression by estradiol through KMT2B-mediated epigenetic modification. *PLoS ONE* 11: e0166090.

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.