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IL-23 (m): 293T Lysate: sc-121044

BACKGROUND

The p19 protein shares sequence similarity with IL-6 subfamily members and is distantly related to the p35 subunit of IL-12. p19 shows no biological activity by itself; instead, it combines with the p40 subunit of IL-12 to form a biologically active, composite cytokine, IL-23. IL-23 shares some *in vivo* functions with IL-12, including the activation of the transcription factor Stat4. Indeed, the receptors for each appear to share one subunit, but also have at least one distinct subunit. Activated dendritic cells secrete detectable levels of this heterodimeric complex and IL-23 binds to IL-12R β 1 but fails to engage IL-12R β 2. Similar to IL-12, human IL-23 stimulates IFN- γ production and proliferation in PHA blast T cells, as well as in CD45RO (memory) T cells. Ubiquitous transgenic expression of the IL-23 subunit p19 induces multi-organ inflammation, runting, infertility and premature death. The gene which encodes IL-23 maps to human chromosome 12.

REFERENCES

- Oppmann, B., Lesley, R., Blom, B., Timans, J.C., Xu, Y., Hunte, B., Vega, F., Yu, N., Wang, J., Singh, K., Zonin, F., Vaisberg, E., Churakova, T., Liu, M., Gorman, D., Wagner, J., Zurawski, S., Liu, Y., Abrams, J.S., et al. 2000. Novel p19 protein engages IL-12 p40 to form a cytokine, IL-23, with biological activities similar as well as distinct from IL-12. *Immunity* 13: 715-725.
- Wiekowski, M.T., Leach, M.W., Evans, E.W., Sullivan, L., Chen, S.C., Vassileva, G., Bazan, J.F., Gorman, D.M., Kastlein, R.A., Narula, S. and Lira, S.A. 2001. Ubiquitous transgenic expression of the IL-23 subunit p19 induces multiorgan inflammation, runting, infertility and premature death. *J. Immunol.* 166: 7563-7570.
- Frucht, D.M. 2002. IL-23: a cytokine that acts on memory T cells. *Sci. STKE* 2002: PE1.
- Cooper, A.M., Kipnis, A., Turner, J., Magram, J., Ferrante, J. and Orme, I.M. 2002. Mice lacking bioactive IL-12 can generate protective, antigen-specific cellular responses to mycobacterial infection only if the IL-12 p40 subunit is present. *J. Immunol.* 168: 1322-1327.
- Watford, W.T., Hissong, B.D., Bream, J.H., Kanno, Y., Muul, L. and O'Shea, J.J. 2004. Signaling by IL-12 and IL-23 and the immunoregulatory roles of Stat4. *Immunol. Rev.* 202: 139-156.
- Vanden Eijnden, S., Goriely, S., De Wit, D., Willems, F. and Goldman, M. 2005. IL-23 upregulates IL-10 and induces IL-17 synthesis by polyclonally activated naive T cells in human. *Eur. J. Immunol.* 35: 469-475.
- Zhang, X.Y., Zhang, H.J., Zhang, Y., Fu, Y.J., He, J., Zhu, L.P., Wang, S.H. and Liu, L. 2006. Identification and expression analysis of alternatively spliced isoforms of human interleukin-23 receptor gene in normal lymphoid cells and selected tumor cells. *Immunogenetics* 57: 934-943.

CHROMOSOMAL LOCATION

Genetic locus: Il23a (mouse) mapping to 10 D3.

PRODUCT

IL-23 (m): 293T Lysate represents a lysate of mouse IL-23 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

IL-23 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive IL-23 antibodies. Recommended use: 10-20 μ l per lane.

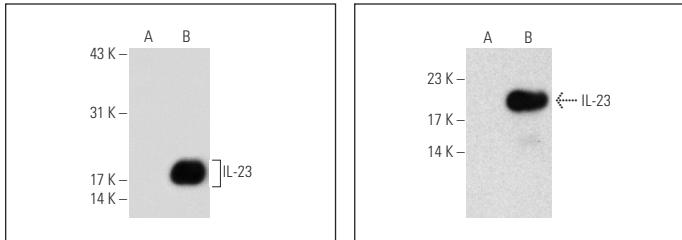
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

IL-23 (C-3): sc-271279 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse IL-23 expression in IL-23 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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.

DATA



IL-23 (C-3): sc-271279. Western blot analysis of IL-23 expression in non-transfected: sc-117752 (**A**) and mouse IL-23 transfected: sc-121044 (**B**) 293T whole cell lysates.
 IL-23 (G-6): sc-271280. Western blot analysis of IL-23 expression in non-transfected: sc-117752 (**A**) and mouse IL-23 transfected: sc-121044 (**B**) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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.