

IL-10R β (S-17): sc-69579

BACKGROUND

The IL-10 receptor, IL-10R, is a member of the class II subgroup of the cytokine receptor family and exhibits structural similarity to the interferon receptor. IL-10R is expressed in B cells and T helper cells, as well as in LPS-induced mouse fibroblasts. Overall, mouse IL-10R and human IL-10R share 60% sequence identity at the protein level. Stimulation with IL-10 leads to phosphorylation of JAK1 and Tyk 2 tyrosine kinases. The activated kinases phosphorylate the two tyrosine residues (Tyr 446 and Tyr 496) in the cytoplasmic domain of IL-10R α . The phosphorylation of these two residues are required for proper function of IL-10R and activation of IL-10E1 signaling. IL-10R β is ubiquitously expressed and, in addition to forming the IL-10 heterodimeric receptor, it forms a heterodimeric receptor with an IL-22R subunit and an IL-28R subunit. IL-10R is constitutively expressed on human natural killer (NK) cells and the direct binding of IL-10 potentiates cytokine production by human NK cells.

REFERENCES

1. Ho, A.S.Y., Liu, Y., Khan, T.A., Hsu, D.H., Bazan, J.F. and Moore, K.W. 1993. A receptor for interleukin-10 is related to interferon receptors. *Proc. Natl. Acad. Sci. USA* 90: 11267-11271.
2. Weber-Nordt, R.M., Meraz, M.A. and Schreiber, R.D. 1994. Lipopoly-saccharide-dependent induction of IL-10 receptor expression on murine fibroblasts. *J. Immunol.* 153: 3734-3744.
3. Ho, A.S., Wei, S.H., Mui, A.L., Miyajima, A. and Moore, K.W. 1995. Functional regions of the mouse interleukin-10 receptor cytoplasmic domain. *Mol. Cell. Biol.* 15: 5043-5053.
4. Tan, J.C., Braun, S., Rong, H., DiGiacomo, R., Dolphin, E., Baldwin, S., Narula, S.K., Zavodny, P.J. and Chou, C.C. 1995. Characterization of recombinant extracellular domain of human interleukin-10 receptor. *J. Biol. Chem.* 270: 12906-12911.
5. Carson, W.E., Lindemann, M.J., Baiocchi, R., Linett, M., Tan, J.C., Chou, C.C., Narula, S. and Caligiuri, M.A. 1995. The functional characterization of interleukin-10 receptor expression on human natural killer cells. *Blood* 85: 3577-3585.
6. Corinti, S., Albanesi, C., la Sala, A., Pastore, S. and Girolomoni, G. 2001. Regulatory activity of autocrine IL-10 on dendritic cell functions. *J. Immunol.* 166: 4312-4318.

CHROMOSOMAL LOCATION

Genetic locus: IL10RB (human) mapping to 21q22.11; Il10rb (mouse) mapping to 16 C3.3.

SOURCE

IL-10R β (S-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of IL-10R β of human origin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-69579 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

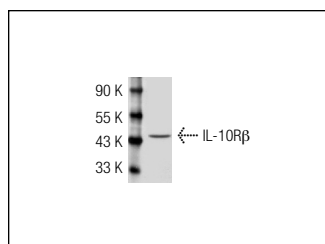
IL-10R β (S-17) is recommended for detection of IL-10R β of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

IL-10R β (S-17) is also recommended for detection of IL-10R β in additional species, including porcine.

Suitable for use as control antibody for IL-10R β siRNA (h): sc-75331, IL-10R β siRNA (m): sc-75332, IL-10R β shRNA Plasmid (h): sc-75331-SH, IL-10R β shRNA Plasmid (m): sc-75332-SH, IL-10R β shRNA (h) Lentiviral Particles: sc-75331-V and IL-10R β shRNA (m) Lentiviral Particles: sc-75332-V.

Molecular Weight of IL-10R β : 37 kDa.

DATA



IL-10R β (S-17): sc-69579. Western blot analysis of IL-10R β expression in Jurkat whole cell lysate.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **IL-10R β (F-6): sc-271969** or **IL-10R β (B-4): sc-514822**, our highly recommended monoclonal alternatives to IL-10R β (S-17).