

# IL-17RB (TJ-5): sc-73969

## BACKGROUND

Cytokines are small, soluble proteins with pleiotropic effects on a variety of cell types. Cytokines have a regulatory function over the immune system and mediate aspects of inflammatory response. They exert their biological effects through the binding of membrane-bound receptors which, in turn, initiate signal transduction cascades and elicit physiological changes in their target cell. IL-17RB is a member of the cytokine receptor family and acts as a receptor for the proinflammatory cytokines IL-17B and IL-17E. It may play a role in hematopoietic cell differentiation and growth. IL-17RB expression is high in liver, colon, brain, kidney and testis. IL-17RB is detected in fibroblast-like synoviocytes of rheumatoid arthritis patients.

## REFERENCES

- Arend, W.P., Malyak, M., Smith, M.F., Jr., Whisenand, T.D., Slack, J.L., Sims, J.E., Giri, J.G. and Dower, S.K. 1994. Binding of IL-1 $\alpha$ , IL-1 $\beta$ , and IL-1 receptor antagonist by soluble IL-1 receptors and levels of soluble IL-1 receptors in synovial fluids. *J. Immunol.* 153: 4766-4774.
- Okamura, H., Tsutsui, H., Komatsu, T., Yutsudo, M., Hakura, A., Tanimoto, T., Torigoe, K., Okura, T., Nukada, Y., Hattori, K., Akita, K., Namba, M., Tanabe, F., Konishi, K., Fukuda, S. and Kurimoto, M. 1995. Cloning of a new cytokine that induces IFN- $\gamma$  production by T cells. *Nature* 378: 88-91.
- Cohen, M.C. and Cohen, S. 1996. Cytokine function: a study in biologic diversity. *Am. J. Clin. Pathol.* 105: 589-598.
- Ihle, J.N. 1996. Janus kinases in cytokine signalling. *Philos. Trans. R. Soc. Lond., B, Biol. Sci.* 351: 159-166.
- Tian, E., Sawyer, J.R., Largaespada, D.A., Jenkins, N.A., Copeland, N.G. and Shaughnessy, J.D., Jr. 2000. EVI27 encodes a novel membrane protein with homology to the IL-17 receptor. *Oncogene* 19: 2098-2109.
- Hwang, S.Y., Kim, J.Y., Kim, K.W., Park, M.K., Moon, Y., Kim, W.U. and Kim, H.Y. 2004. IL-17 induces production of IL-6 and IL-8 in rheumatoid arthritis synovial fibroblasts via NF $\kappa$ B- and PI 3-kinase/Akt-dependent pathways. *Arthritis Res. Ther.* 6: 120-128.

## CHROMOSOMAL LOCATION

Genetic locus: Il17rb (mouse) mapping to 14 B.

## SOURCE

IL-17RB (TJ-5) is a rat monoclonal antibody raised against an extracellular domain of IL-17RB of mouse origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>2b</sub> in 1.0 ml of PBS with < 0.1% sodium azide and protein stabilizer.

## STORAGE

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

## APPLICATIONS

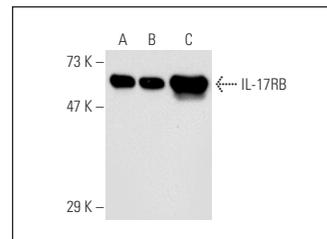
IL-17RB (TJ-5) is recommended for detection of IL-17RB of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)]; non cross-reactive with IL-17R.

Suitable for use as control antibody for IL-17RB siRNA (m): sc-39965, IL-17RB shRNA Plasmid (m): sc-39965-SH and IL-17RB shRNA (m) Lentiviral Particles: sc-39965-V.

Molecular Weight of IL-17RB: 56 kDa.

Positive Controls: IL-17RB (m): 293T Lysate: 293T Lysate: sc-121035 or NIH/3T3 whole cell lysate: sc-2210.

## DATA



IL-17RB (TJ-5): sc-73969. Western blot analysis of IL-17RB expression in non-transfected 293T: sc-117752 (A), mouse IL-17RB transfected 293T: sc-121035 (B) and NIH/3T3 (C) whole cell lysates.

## SELECT PRODUCT CITATIONS

- Xiao, G., Kumar, R., Komuro, Y., Burguet, J., Kakarla, V., Azizkhanian, I., Sheth, S.A., Williams, C.K., Zhang, X.R., Macknicki, M., Brumm, A., Kawaguchi, R., Mai, P., Kaneko, N., Vinters, H.V., Carmichael, S.T., et al. 2022. IL-17/CXCL5 signaling within the oligovascular niche mediates human and mouse white matter injury. *Cell Rep.* 41: 111848.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.