

IL-10R α (K-20): sc-987

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

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2. Weber-Nordt, R.M., Meraz, M.A. and Schreiber, R.D. 1994. Lipopolysaccharide-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.

CHROMOSOMAL LOCATION

Genetic locus: IL10RA (human) mapping to 11q23.3; Il10ra (mouse) mapping to 9 A5.2.

SOURCE

IL-10R α (K-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of IL-10R α of mouse origin.

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-987 P, (100 μ 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.

APPLICATIONS

IL-10R α (K-20) is recommended for detection of IL-10R α of mouse, rat and, to a lesser extent, 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).

Suitable for use as control antibody for IL-10R α siRNA (h): sc-35646, IL-10R α siRNA (m): sc-72018, IL-10R α shRNA Plasmid (h): sc-35646-SH, IL-10R α shRNA Plasmid (m): sc-72018-SH, IL-10R α shRNA (h) Lentiviral Particles: sc-35646-V and IL-10R α shRNA (m) Lentiviral Particles: sc-72018-V.

Molecular Weight of IL-10R α : 63 kDa.

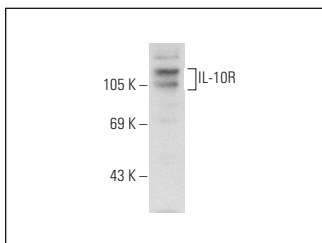
Molecular Weight of glycosylated IL-10R α : 90-110 kDa.

Positive Controls: J774.A1 cell lysate: sc-3802.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



IL-10R (K-20): sc-987. Western blot analysis of IL-10R expression in J774.A1 whole cell lysate.

RESEARCH USE

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

MONOS
Satisfaction
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Try α (E-6): sc-28371 or α (A-3): sc-365374, our highly recommended monoclonal alternatives to IL-10R α (K-20).