IL- $10R\alpha$ (N-20): sc-986



The Power to Question

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 hetero-dimeric 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.

CHROMOSOMAL LOCATION

Genetic locus: IL10RA (human) mapping to 11q23.3; II10ra (mouse) mapping to 9 A5.2.

SOURCE

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

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-986 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IL-10R α (N-20) is recommended for detection of IL-10R α of human and, to a lesser extent, mouse and rat 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 α (N-20) is also recommended for detection of IL-10R α in additional species, including bovine.

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-10Rα: 63 kDa.

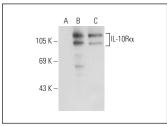
Molecular Weight of glycosylated IL-10Rα: 90-110 kDa.

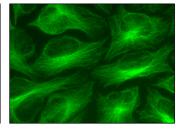
Positive Controls: IL-10R α (h): 293T Lysate: sc-176018 or NAMALWA cell lysate: sc-2234.

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 α (N-20): sc-986. Western blot analysis of IL-10R α expression in non-transfected 293T: sc-117752 (**A**), human IL-10R α transfected 293T: sc-176018 (**B**) and J774.A1 (**C**) whole cell Iysates.

lL-10R α (N-20): sc-986. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane and cytoplasmic localization.

SELECT PRODUCT CITATIONS

 Kotenko, S.V., et al. 1997. Identification and functional characterization of a second chain of the interleukin-10 receptor complex. EMBO J. 19: 5894-5903.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. 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 or our catalog for detailed protocols and support products.



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

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