SANTA CRUZ BIOTECHNOLOGY, INC.

IL-10R (1B1.3a): sc-53706



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 $_{\alpha}$. 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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CHROMOSOMAL LOCATION

Genetic locus: II10rb (mouse) mapping to 16 C3.3.

SOURCE

IL-10R (1B1.3a) is a rat monoclonal antibody raised against soluble IL-10R of mouse origin.

PRODUCT

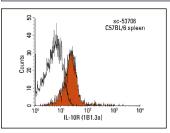
Each vial contains 100 $\mu g~lgG_1$ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

IL-10R (1B1.3a) is recommended for detection of IL-10R of mouse origin by flow cytometry (1 μ g per 1 x 10⁶ cells).

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

DATA



IL-10R (1B1.3a): sc-53706. Indirect FCM analysis of C57BL/6 splenocytes stained with IL-10R (1B1.3a), followed by PE-conjugated goat anti-rat IgG: sc-3740. Black line histogram represents the isotype control, normal rat IgG_1: sc-3882.

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 for detailed protocols and support products.