

IL-15R α (N-20): sc-5526

BACKGROUND

Interleukin-15 (IL-15), also designated IL-T, is a cloned cytokine which shares several biological activities but no sequence homology with IL-2. Human, mouse and simian IL-15 cDNA clones have been isolated and characterized. All 3 species encode a 162 amino acid residue precursor protein containing a 48 amino acid leader that is cleaved to generate the mature form of IL-15. IL-15 stimulates the proliferation of T cells and NK cells, while enhancing B cell expansion and antibody production. Unlike IL-2, IL-15 is not produced by lymphocytes, but appears to be produced by macrophages, epithelial lines, muscle and placenta. IL-15 has also been shown to be a chemoattractant for human blood T lymphocytes and to be able to induce lymphokine-activated killer (LAK) activity in NK cells as well as to be able to induce the generation of cytolytic effector cells. Studies have shown that IL-15 is the only other cytokine that shares the β signaling subunit of the IL-2R. Evidence also suggests that like IL-2, IL-4 and IL-7, IL-15 utilizes the common IL-2R γ subunit.

CHROMOSOMAL LOCATION

Genetic locus: IL15RA (human) mapping to 10p15.1.

SOURCE

IL-15R α (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of IL-15R α of human 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-5526 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-15R α (N-20) is recommended for detection of IL-15R α of 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), immunohistochemistry (including paraffin-embedded sections) (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-15R α siRNA (h): sc-40051, IL-15R α shRNA Plasmid (h): sc-40051-SH and IL-15R α shRNA (h) Lentiviral Particles: sc-40051-V.

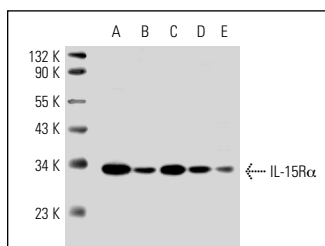
Molecular Weight of IL-15R α : 30 kDa.

Positive Controls: Caco-2 cell lysate: sc-2262, HuT 78 whole cell lysate: sc-2208 or MOLT-4 cell lysate: sc-2233.

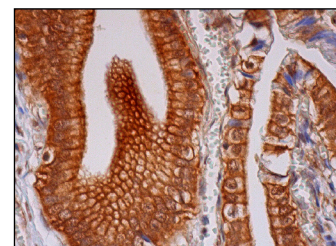
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



IL-15R α (N-20): sc-5526. Western blot analysis of IL-15R α expression in Raji (A), MOLT-4 (B), HuT 78 (C), U-698-M (D) and Caco-2 (E) whole cell lysates.



IL-15R α (N-20): sc-5526. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing membrane, cytoplasmic and nuclear staining of glandular cells.

SELECT PRODUCT CITATIONS

- Hocke, A.C., et al. 2007. Cell-specific interleukin-15 and interleukin-15 receptor subunit expression and regulation in pneumococcal pneumonia—comparison to chlamydial lung infection. *Cytokine* 38: 61-73.
- Hocke, A.C., et al. 2008. Subcellular expression pattern and role of IL-15 in pneumococci induced lung epithelial apoptosis. *Histochem. Cell Biol.* 130: 165-176.
- Wu, X., et al. 2010. Cerebral interleukin-15 shows upregulation and beneficial effects in experimental autoimmune encephalomyelitis. *J. Neuroimmunol.* 223: 65-72.

RESEARCH USE

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



Try **IL-15R α (G-3): sc-374023** or **IL-15R α (G-7): sc-271366**, our highly recommended monoclonal alternatives to IL-15R α (N-20).