

IL-16 (H-110): sc-7902

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 that elicit physiological changes in their target cells. Interleukin-16, or IL-16, is a cytokine that has chemoattractant activity on CD4⁺ T lymphocytes. It has long been known that eosinophils and CD4⁺ T lymphocytes are recruited to sites of allergic inflammation, but the molecular mechanism was poorly understood. IL-16, also referred to as lymphocyte chemoattractant factor, is secreted by activated eosinophils as part of the allergic response along with RANTES, an additional cytokine. Once bound to its cognate receptor, CD4, IL-16 initiates a signal cascade that results in the activation of the PKC family.

CHROMOSOMAL LOCATION

Genetic locus: IL16 (human) mapping to 15q25.1; IL16 (mouse) mapping to 7 D3.

SOURCE

IL-16 (H-110) is a rabbit polyclonal antibody raised against amino acids 522-631 of IL-16 of human origin.

APPLICATIONS

IL-16 (H-110) is recommended for detection of IL-16 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

IL-16 (H-110) is also recommended for detection of IL-16 in additional species, including bovine and porcine.

Suitable for use as control antibody for IL-16 siRNA (h): sc-39647, IL-16 siRNA (m): sc-39648, IL-16 shRNA Plasmid (h): sc-39647-SH, IL-16 shRNA Plasmid (m): sc-39648-SH, IL-16 shRNA (h) Lentiviral Particles: sc-39647-V and IL-16 shRNA (m) Lentiviral Particles: sc-39648-V.

Molecular Weight of mature IL-16: 20 kDa.

Molecular Weight of IL-16 precursor: 40-75 kDa.

Positive Controls: mouse lung extract: sc-2390.

PRODUCT

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

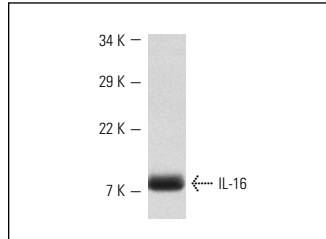
STORAGE

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

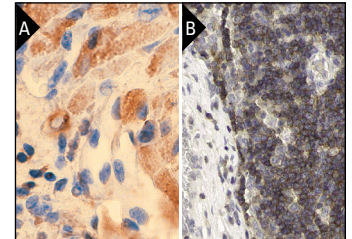
RESEARCH USE

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

DATA



IL-16 (H-110): sc-7902. Western blot analysis of human recombinant IL-16.



IL-16 (H-110): sc-7902. Immunoperoxidase staining of formalin fixed, paraffin-embedded mouse lung tissue showing cytoplasmic and extracellular localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human lymph node tissue showing weak cytoplasmic and membrane staining in follicle cells, and strong cytoplasmic and membrane staining in non-follicle cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program (B).

SELECT PRODUCT CITATIONS

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- Chaouat, G., et al. 2002. A brief review of recent data on some cytokine expressions at the materno-foetal interface which might challenge the classical Th1/Th2 dichotomy. *J. Reprod. Immunol.* 53: 241-256.
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