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IL31 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9388a

Product Information

Application	IHC-P, FC, WB, E
Primary Accession	Q6EBC2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	18205
Antigen Region	13-40

Additional Information

Gene ID	386653
Other Names	Interleukin-31, IL-31, IL31
Target/Specificity	This IL31 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 13-40 amino acids from the N-terminal region of human IL31.
Dilution	IHC-P~~1:100~500 FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	IL31 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	IL31 (HGNC:19372)
Function	Functions as a cytokine that binds to IL31RA, a membrane- bound signal-transducing subunit of the IL31 receptor complex (heterodimer composed of OSMR and IL31RA) (PubMed:15184896, PubMed:15627637). Functionally, IL31 signaling via OSMR/IL31RA is particularly important in skin immunity (PubMed:15184896). Mechanistically, ligand binding to IL31RA,

induces heterodimerization with OSMR, activating JAK1 and JAK2 (and to a lesser extent TYK2) associated with the intracellular domains of IL31RA and OSMR (PubMed:15627637). These kinases phosphorylate tyrosine residues on IL31RA and OSMR, creating docking sites for STAT1, STAT3, and STAT5B, which are then phosphorylated and activated (PubMed:15184896, PubMed:15627637). In addition, the IL31 receptor complex activates the MAPK pathway (MAPK3/ERK1-MAPK1/ERK2) via recruitment of the adapter protein SHC1 (PubMed:15627637). Enhances myeloid progenitor cell survival in vitro (By similarity). Induces RETNLA and serum amyloid A protein expression in macrophages (By similarity).

Cellular Location Secreted.

Tissue Location Detected at low levels in testis, bone marrow, skeletal muscle, kidney, colon, thymus, small intestine and trachea

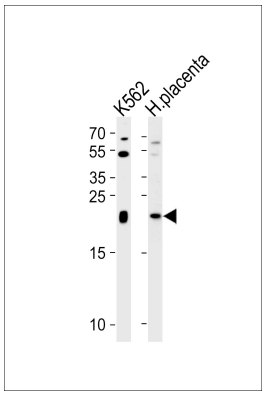
Background

IL31, which is made principally by activated Th2-type T cells, interacts with a heterodimeric receptor consisting of IL31RA (MIM 609510) and OSMR (MIM 601743) that is constitutively expressed on epithelial cells and keratinocytes. IL31 may be involved in the promotion of allergic skin disorders and in regulating other allergic diseases, such as asthma.

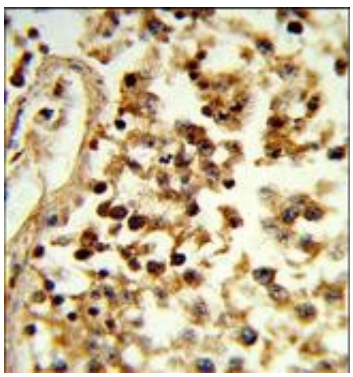
References

Le Saux, S., et al. J. Biol. Chem. 285(5):3470-3477(2010) Zucchelli, M., et al. Inflamm. Bowel Dis. 15(7):961-962(2009) Gutzmer, R., et al. J. Allergy Clin. Immunol. 123(3):619-625(2009) Zhang, Q., et al. Cytokine Growth Factor Rev. 19 (5-6), 347-356 (2008) : Werfel, T., et al. Chem Immunol Allergy 94, 101-111 (2008) :

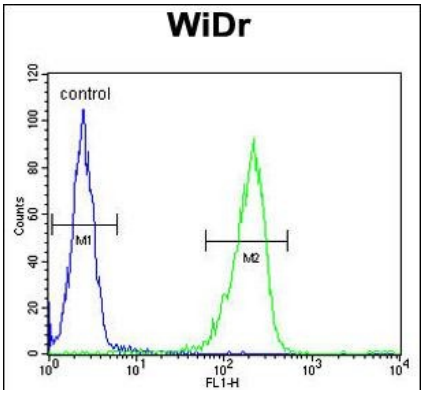
Images



Western blot analysis of lysates from K562 cell line and human placenta tissue lysate (from left to right), using IL31 Antibody (N-term)(Cat. #AP9388a). AP9388a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



Formalin-fixed and paraffin-embedded human testis tissue reacted with IL31 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



IL31 Antibody (N-term) (Cat. #AP9388a) flow cytometric analysis of WiDr cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.