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Anti-IL-31RA Antibody

Catalog # AP59896

Product Information

Application	WB, IF/IC
Primary Accession	Q8NI17
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	82954

Additional Information

Gene ID	133396
Other Names	CRL3; GPL; Interleukin-31 receptor subunit alpha; IL-31 receptor subunit alpha; IL-31R subunit alpha; IL-31R-alpha; IL-31RA; Cytokine receptor-like 3; GLM-R; hGLM-R; Gp130-like monocyte receptor; Gp130-like receptor; ZcytoR17
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human IL-31RA. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	IL31RA (HGNC:18969)
Synonyms	CRL3, GPL
Function	Functions as a membrane-bound signal-transducing subunit of the IL31 receptor complex (heterodimer composed of OSMR and IL31RA) which binds IL31 (PubMed:15184896, PubMed:15194700, PubMed:15627637). Functionally, IL31 signaling via OSMR/IL31RA is particularly important in skin immunity (PubMed:15184896). Mechanistically, ligand binding induces heterodimerization with OSMR, activating JAK1 and JAK2 (and to a lesser extent TYK2) associated with the intracellular domains of IL31RA and OSMR (PubMed:15194700, 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 (Probable) (PubMed:11877449, PubMed:15194700, PubMed:15627637). In addition, the

IL31 receptor complex activates the MAPK pathway (MAPK3/ERK1-MAPK1/ERK2) via recruitment of the adapter protein SHC1 (PubMed:15194700, PubMed:15627637). Mediates IL31-induced itch, probably in a manner dependent on cation channels TRPA1 and TRPV1 (By similarity). Positively regulates numbers and cycling status of immature subsets of myeloid progenitor cells in bone marrow in vivo and enhances myeloid progenitor cell survival in vitro (By similarity).

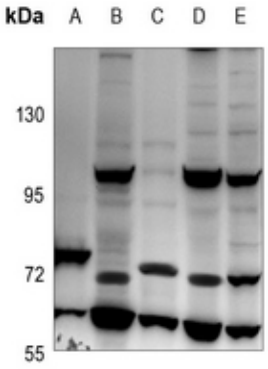
Cellular Location

Cell membrane; Single-pass type I membrane protein. Presynaptic cell membrane {ECO:0000250|UniProtKB:Q8K5B1}. Cell projection, axon {ECO:0000250|UniProtKB:Q8K5B1}

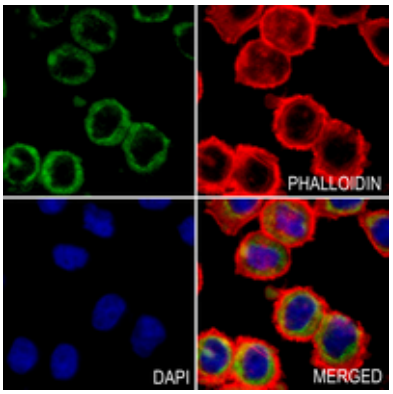
Tissue Location

Expressed in CD14- and CD56-positive blood cells (PubMed:11877449). Expressed in macrophages (PubMed:16461143, PubMed:18439099). Expressed in keratinocytes (PubMed:21261663) Expressed in a subset of dorsal root ganglia neurons (at protein level) (PubMed:24373353). Expressed at low levels in testis, ovary, brain, prostate, placenta, thymus, bone marrow, trachea and skin (PubMed:11877449, PubMed:14504285, PubMed:15184896). Expressed in bronchial and alveolar epithelial cells and pulmonary fibroblasts (PubMed:18439099). Detected in all of the myelomonocytic lineage (PubMed:14504285). Isoform 6: Expressed at higher levels in lesional skin compared to healthy skin of atopic dermatitis patients (PubMed:24373353).

Images



Western blot analysis of IL-31RA expression in HuT78 (A), Myla2078 (B), PC3 (C), CT26 (D), C6 (E) whole cell lysates. (Predicted band size: 82 kD; Observed band size: 82; 64 kD)



Immunofluorescent analysis of IL-31RA staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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