

# IL-31 Antibody

Catalog # ASC10398

### **Product Information**

Application WB, IF, E
Primary Accession O6EAL8

Other Accession <u>AAS82846</u>, <u>46241139</u>

Reactivity
Human
Rabbit
Clonality
Polyclonal
Isotype
IgG
Calculated MW
18120
Concentration (mg/ml)
Conjugate
Unconjugated

**Application Notes** IL-31 antibody can be used for the detection of IL-31 by Western blot at 2.5 -

10 [g/mL. Despite its predicted size, IL-31 runs at approximately 27 - 30 kDa

in SDS-PAGE. For immunofluorescence start at 20 g/mL.

## **Additional Information**

**Gene ID** 76399

Other Names IL-31 Antibody: 1700013B14Rik, Interleukin-31, IL-31, interleukin 31

Target/Specificity II31;

**Reconstitution & Storage** IL-31 antibody can be stored at 4°C for three months and -20°C, stable for up

to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high

temperatures.

**Precautions** IL-31 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

#### **Protein Information**

Name II31

**Function** Activates STAT3 and possibly STAT1 and STAT5 through the IL31

heterodimeric receptor composed of IL31RA and OSMR (PubMed:15184896). May function in skin immunity (PubMed:15184896). Enhances myeloid progenitor cell survival in vitro (PubMed:17379091). Induces RETNLA and serum amyloid A protein expression in macrophages (PubMed:25847241).

**Cellular Location** Secreted.

## **Background**

IL-31 Antibody: Interleukin-31 (IL-31) is a recently discovered T-cell cytokine closely related to IL-6 type cytokines and is preferentially produced by T helper type 2 cells. IL-31 activity is mediated through the ligand-induced oligomerization of a dimeric receptor complex containing IL-31 receptor A and oncostatin M receptor. In response to IL-31 binding, these proteins activate the JAK/STAT and the AKT signaling pathways. RNA levels of IL-31 receptor A and oncostatin M receptor are induced in activated monocytes but are expressed constitutively in epithelial cells. IL-31, when overexpressed in transgenic mice, results in the development of pruritis, alopecia, and skin lesions and in humans may result in atopic dermatitis, suggesting that IL-31 may represent a novel target for antipruritic drug development.

#### References

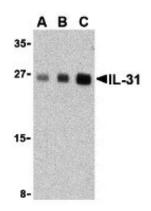
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Diveu C, Lak-Hal AH, Froger J, et al. Predominant expression of the long isoform of GP130-like (GPL) receptor is required for interleukin-31 signaling. Eur. Cytokine Netw. 2004; 15:291-302.

Bilsborough J, Leung DY, Maurer M, et al. IL-31 is associated with cutaneous lymphocyte antigen-positive skin homing T cells in patients with atopic dermatitis. J. Allergy Clin. Immunol. 2006; 117:418-25.

# **Images**



Western blot analysis of IL-31 in human skeletal muscle tissue lysate with IL-31 antibody at (A) 2.5, (B) 5 and (C) 10  $\mu$ g/mL.



Immunofluorescence of IL-31 in Human Skeletal Muscle cells with IL-31 antibody at 20  $\mu$ g/mL.

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