

#### **IL-31 Antibody**

Catalog # ASC10397

#### **Specification**

### **IL-31 Antibody - Product Information**

**Application Primary Accession** Other Accession Reactivity Host Clonality

Isotype **Application Notes** 

IL-31 antibody can be used for the detection of IL-31 by Western blot at 2.5 -10 μg/mL. Antibody can also be used for immunohistochemistry starting at 10

μg/mL.

WB, IHC-P, E

AAS82846, 46241139

O6EAL8

Mouse

Rabbit

laG

**Polyclonal** 

## **IL-31 Antibody - 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.

# **IL-31 Antibody - Protein Information**

#### Name II31

#### **Function**

Activates STAT3 and possibly STAT1 and STAT5 through the IL31 heterodimeric receptor composed of IL31RA and OSMR (PubMed: <a href="http://www.uniprot.org/citations/15184896" target=" blank">15184896</a>). May function in skin immunity (PubMed:<a href="http://www.uniprot.org/citations/15184896" target="\_blank">15184896</a>). Enhances myeloid progenitor cell survival in vitro (PubMed:<a href="http://www.uniprot.org/citations/17379091" target="\_blank">17379091</a>). Induces RETNLA and serum amyloid A protein expression in macrophages (PubMed: <a

href="http://www.uniprot.org/citations/25847241" target=" blank">25847241</a>).



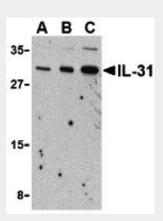
**Cellular Location** Secreted.

# **IL-31 Antibody - Protocols**

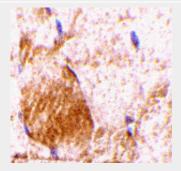
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

### IL-31 Antibody - Images



Western blot analysis of IL-31 in RAW264.7 cell lysate with IL-31 antibody at (A) 2.5, (B) 5 and (C)  $10 \mu g/mL$ .



Immunohistochemistry of IL-31 in rat skeletal muscle tissue with IL-31 antibody at 10 μg/mL.

# IL-31 Antibody - 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





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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.

# **IL-31 Antibody - References**

Dillon SR, Sprecher C, Hammond A, et al. Interleukin 31, a cytokine produced by activated T cells, induces dermatitis in mice. Nat. Immunol. 2004; 5:752-60.

Dreuw A, Radtke S, Pflanz S, et al. Characterization of the signaling capacities of the novel gp130-like cytokine receptor. J. Biol. Chem. 2004; 279:36112-20.

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.