

**IL-31 Antibody**  
**Catalog # ASC10398****Specification**

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**IL-31 Antibody - Product Information**

Application	WB, IF, E
Primary Accession	<a href="#">Q6EAL8</a>
Other Accession	<a href="#">AAS82846</a> , <a href="#">46241139</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	IL-31 antibody can be used for the detection of IL-31 by Western blot at 2.5 - 10 µg/mL. Despite its predicted size, IL-31 runs at approximately 27 - 30 kDa in SDS-PAGE. For immunofluorescence start at 20 µg/mL.

**IL-31 Antibody - Additional Information**

Gene ID	76399
Other Names	
IL-31 Antibody: 1700013B14Rik, Interleukin-31, IL-31, interleukin 31	

**Target/Specificity**  
IL31;**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** IL31**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>).

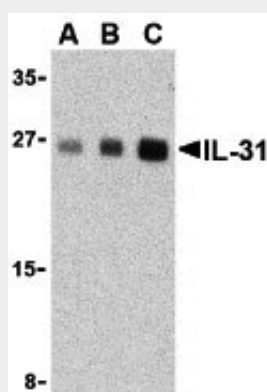
**Cellular Location**  
Secreted.

### IL-31 Antibody - Protocols

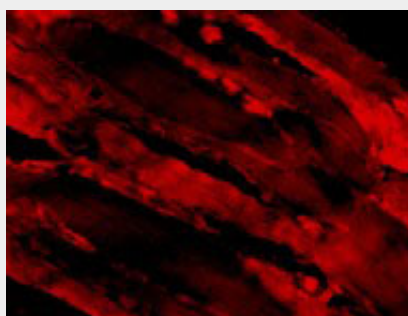
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### IL-31 Antibody - 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 µg/mL.



Immunofluorescence of IL-31 in Human Skeletal Muscle cells with IL-31 antibody at 20 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 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.