

IL-31 Antibody

IL-31 (NT): Interleukin 31

CATALOG NO.: 3745

BACKGROUND:

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 (1,2). IL-31 activity is mediated through the ligand-induced oligomerization of a dimeric receptor complex containing IL-31 receptor A and oncostatin M receptor (2). In response to IL-31 binding, these proteins activate the JAK/STAT and the AKT signaling pathways (3). RNA levels of IL-31 receptor A and oncostatin M receptor are induced in activated monocytes but are expressed constitutively in epithelial cells (1). 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 (1,4).

SOURCE:

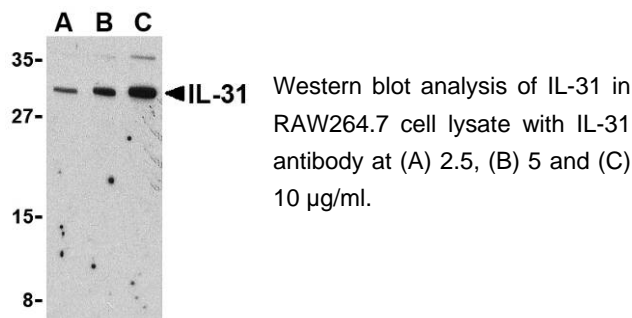
Rabbit polyclonal IL-31 antibody was raised against a 16 amino acid peptide from near the amino terminus of mouse IL-31 (Genbank accession No. AAS82846).

APPLICATION:

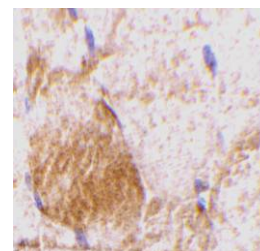
IL-31 antibody can be used for the detection of IL-31 by Western blot at 2.5 – 5 µg/ml. (Optimal dilution should be determined by user.) RAW264.7 cell lysate can be used as positive control. Despite its predicted size, IL-31 runs at approximately 30 kDa in SDS-PAGE. IL-31 antibody is mouse specific. **This product is for research use only.**

STORAGE:

IL-31 antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



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



RELATED PRODUCTS:

Blocking peptide, Catalog No. **3745P**.
RAW264.7 Cell Lysate, Catalog No. **1283**.
IL-31 Antibody (IN), Catalog No. **3747**.
STAT1 Antibody (CT), Catalog No. **1021**.
AKT Antibody, Catalog No. **3519**.

REFERENCES:

1. 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.
2. 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.
3. 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.
4. 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.
(06-01D)