

## Interleukin-31 / IL-33 Antibody

Mouse Monoclonal Antibody [Clone IL31/7333]

Catalog No	Format	Size
386653-MSM3-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
386653-MSM3-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
386653-MSM3-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

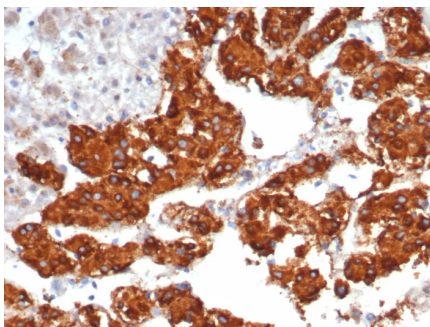
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

### Product Details

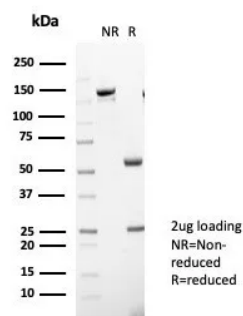
<b>Clone</b>	IL31/7333
<b>Gene Name</b>	IL31
<b>Immunogen</b>	Recombinant fragment (around aa1-164) of human IL31 protein (exact sequence is proprietary)
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG
<b>Mol. Weight of Antigen</b>	18 kDa
<b>Cellular Localization</b>	Secreted.
<b>Species Reactivity</b>	Human
<b>Positive Control</b>	bone marrow colon Detected at low levels in testis kidney skeletal muscle small intestine and trachea. thymus

\*Optimal dilution for a specific application should be determined.

### Product Images for Interleukin-31 / IL-33 Antibody



Formalin-fixed, paraffin-embedded human adrenal gland stained with Interleukin-31 (IL-31) Mouse Monoclonal Antibody (IL31/7333). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.



SDS-PAGE Analysis of Purified Interleukin-31 Mouse Monoclonal Antibody (IL31/7333). Confirmation of Purity and Integrity of Antibody.

### **Specificity & Comments**

IL-31 is a T cell cytokine that is preferentially produced by T helper type 2 cells. IL-31 signals through a heterodimeric receptor composed of the IL-31 receptor (IL-31R) and the oncostatin M receptor (OSM). This receptor complex recruits JAK1, JAK2, Stat1, Stat3 and Stat5 signaling pathways, as well as the PI3 kinase/AKT cascade. SHP-2 and Shc adapter molecules are also recruited and contribute to an increased activation of the MAP kinase pathway in response to IL-31. Overexpression of IL-31 in mice results in pruritus and skin dermatitis resembling human atopic dermatitis (AD). Comparisons between skin from patients with AD and healthy skin showed IL-31R expression at higher levels on epidermal keratinocytes in AD samples. Infiltrating cells, more numerous in skin from patients with AD compared with that of healthy individuals, expressed IL-31 mRNA. IL-31 may participate in the cause of itch sensation and promote scratching behavior in NC/Nga mice with atopic dermatitis, and may represent a novel target for antipruritic drug development.

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### **Limitations and Warranty**

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

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### **Supplied As**

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

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### **Storage and Stability**

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

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### **Research Areas**

Immunology, Cytokine Signaling

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