

**Anti-IL-31Ra Reference Antibody (nemolizumab)  
Recombinant Antibody  
Catalog # APR10127****Specification**

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**Anti-IL-31Ra Reference Antibody (nemolizumab) - Product Information**

Application	FC, Kinetics, Animal Model
Primary Accession	<a href="#">Q8NI17</a>
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG2SA
Calculated MW	144.92 KDa

**Anti-IL-31Ra Reference Antibody (nemolizumab) - Additional Information****Target/Specificity**  
IL-31Ra**Endotoxin**  
< 0.001EU/ µg,determined by LAL method.**Conjugation**  
Unconjugated**Expression system**  
CHO Cell**Format**  
Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.**Anti-IL-31Ra Reference Antibody (nemolizumab) - Protein Information****Name** IL31RA**Synonyms** CRL3, GPL**Function**  
Associates with OSMR to form the interleukin-31 receptor which activates STAT3 and to a lower extent STAT1 and STAT5 (PubMed:<a href="http://www.uniprot.org/citations/11877449" target="\_blank">11877449</a>, PubMed:<a href="http://www.uniprot.org/citations/14504285" target="\_blank">14504285</a>, PubMed:<a href="http://www.uniprot.org/citations/15194700" target="\_blank">15194700</a>, PubMed:<a href="http://www.uniprot.org/citations/15627637" target="\_blank">15627637</a>). May function in skin immunity (PubMed:<a href="http://www.uniprot.org/citations/15184896" target="\_blank">15184896</a>). Mediates IL31-induced itch, probably in a manner dependent on cation channels TRPA1 and TRPV1 (By similarity). Positively regulates numbers and cycling status of immature subsets of myeloid progenitor cells in bone marrow in vivo and enhances myeloid progenitor cell survival in vitro (By

similarity).

#### Cellular Location

Cell membrane; Single-pass type I membrane protein. Presynaptic cell membrane {ECO:0000250|UniProtKB:Q8K5B1}. Cell projection, axon {ECO:0000250|UniProtKB:Q8K5B1}

#### Tissue Location

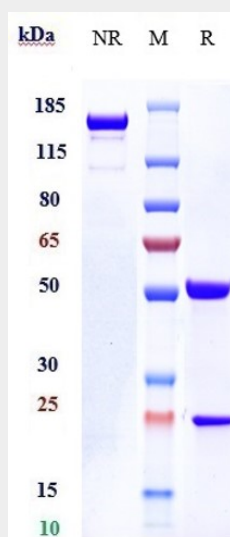
Expressed in CD14- and CD56-positive blood cells (PubMed:11877449). Expressed in macrophages (PubMed:16461143, PubMed:18439099). Expressed in keratinocytes (PubMed:21261663). Expressed in a subset of dorsal root ganglia neurons (at protein level) (PubMed:24373353). Expressed at low levels in testis, ovary, brain, prostate, placenta, thymus, bone marrow, trachea and skin (PubMed:11877449, PubMed:14504285, PubMed:15184896). Expressed in bronchial and alveolar epithelial cells and pulmonary fibroblasts (PubMed:18439099). Detected in all of the myelomonocytic lineage (PubMed:14504285). Isoform 6: Expressed at higher levels in lesional skin compared to healthy skin of atopic dermatitis patients (PubMed:24373353).

### Anti-IL-31Ra Reference Antibody (nemolizumab) - Protocols

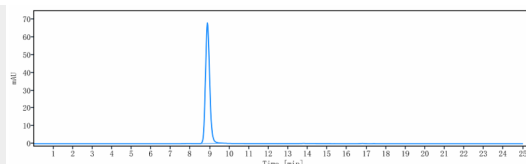
Provided below are standard protocols that you may find useful for product applications.

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

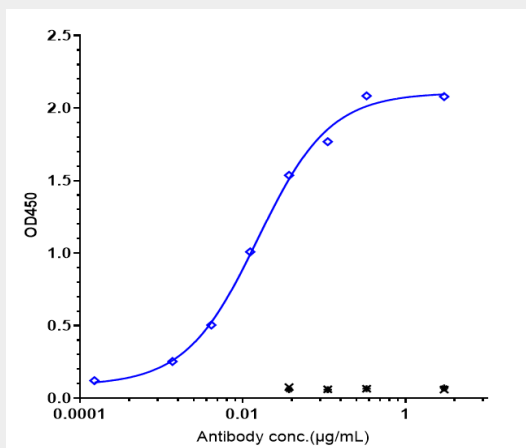
### Anti-IL-31Ra Reference Antibody (nemolizumab) - Images



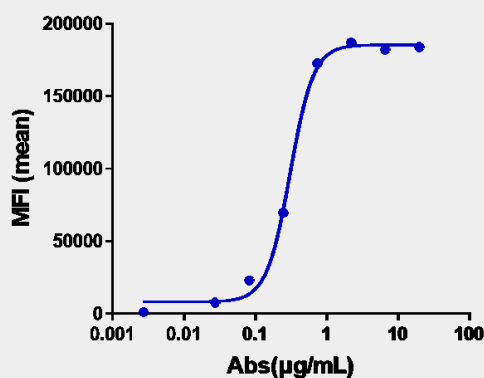
Anti-IL-31Ra Reference Antibody (nemolizumab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



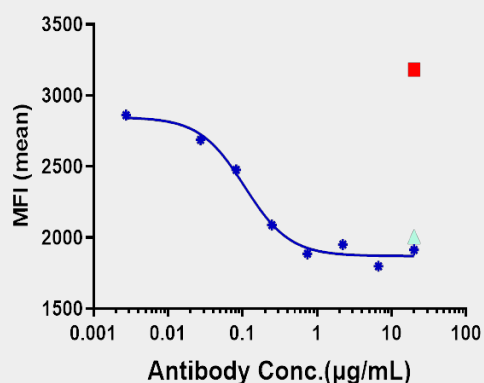
The purity of Anti-IL-31Ra Reference Antibody (nemolizumab) is more than 100%, determined by SEC-HPLC.



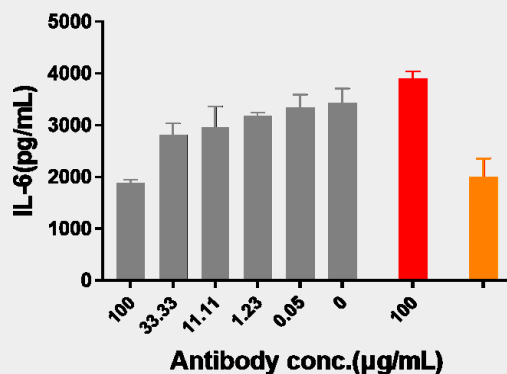
Immobilized human IL31R His at 2 µg/mL can bind Anti-IL-31Ra Reference Antibody (nemolizumab)  $EC_{50} = 0.0153 \mu\text{g/mL}$



Human IL31R HEK293 cells were stained with Anti-IL-31Ra Reference Antibody (nemolizumab) and negative control protein respectively, washed and then followed by PE and analyzed with FACS,  $EC_{181} = 0.307 \mu\text{g/mL}$



Anti-IL-31Ra Reference Antibody (nemolizumab) P-STAT3 Assay was evaluated using Du145. The IC50 was approximately 0.1068 ug/ml.



Anti-IL-31Ra Reference Antibody (nemolizumab) Activation inhibition was evaluated using Hacat. The max induction fold was approximately 1.86.