

# Human IL-31 RA Protein

Cat. No. ILR-HM2RA

## Description

<b>Source</b>	Recombinant Human IL-31 RA Protein is expressed from HEK293 with hFc tag at the C-Terminus. It contains Ala20-Glu519.
<b>Accession</b>	Q8NI17-1
<b>Molecular Weight</b>	The protein has a predicted MW of 83.8 kDa. Due to glycosylation, the protein migrates to 110-135 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

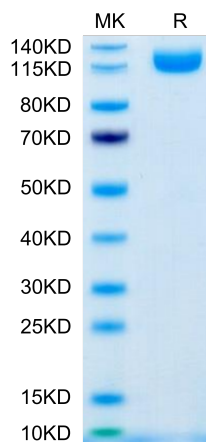
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Interleukin-31 receptor A (IL-31RA) is a newly identified type I cytokine receptor, that is related to gp130, the common receptor of the interleukin (IL) -6 family cytokines. IL-31RA forms a functional receptor complex for IL-31 together with the beta subunit of oncostatin M receptor (OSMRbeta). OSMRbeta is expressed in a subset of small-sized nociceptive neurons of adult dorsal root ganglia (DRGs). IL-31 and OSM may thus have redundant functions in the development of OSMRbeta-expressing neurons.

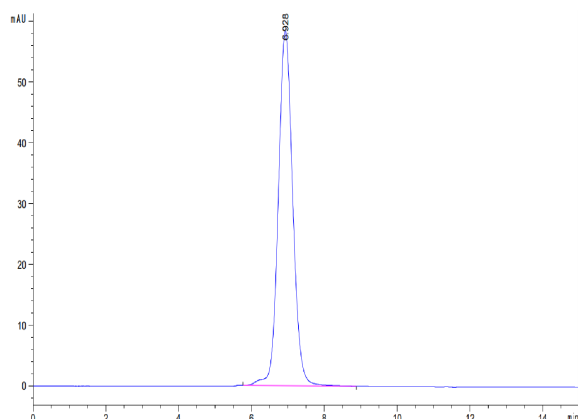
## Assay Data

### Bis-Tris PAGE



Human IL-31 RA on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



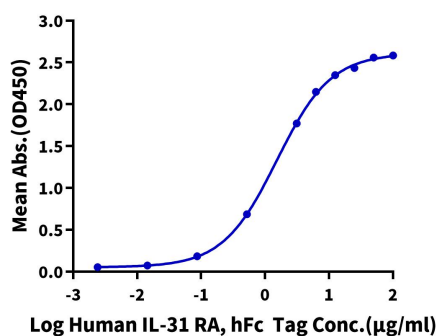
The purity of Human IL-31 RA is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

**Human IL-31 RA, hFc Tag ELISA**

0.5µg Human IL-31, His Tag Per Well

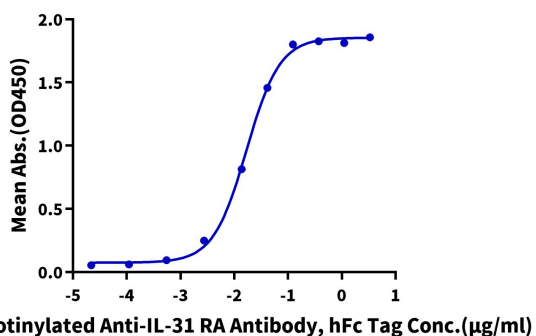


Immobilized Human IL-31, His Tag at 5µg/ml (100µl/Well) on the plate. Dose response curve for Human IL-31 RA, hFc Tag with the EC50 of 1.53µg/ml determined by ELISA (QC Test).

ELISA Data

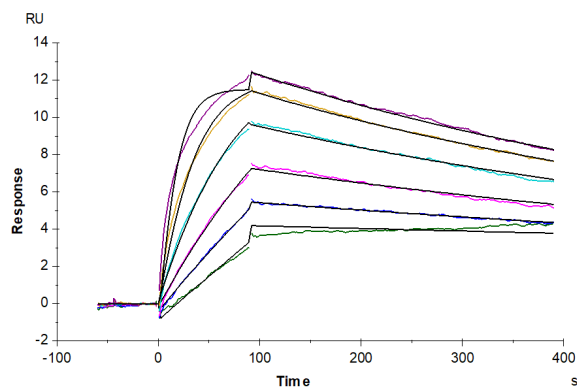
**Human IL-31 RA, hFc Tag ELISA**

0.5µg Human IL-31 RA, hFc Tag Per Well



Immobilized Human IL-31 RA, hFc Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Anti-IL-31 RA Antibody, hFc Tag with the EC50 of 16.9ng/ml determined by ELISA.

SPR Data



Human IL-31 RA, hFc Tag captured on CM5 Chip via Protein A can bind Human IL-31, His Tag with an affinity constant of 1.97 nM as determined in SPR assay (Biacore T200).