# Human IL-31 RA Protein

#### Cat. No. ILR-HM1RA



Description	
Source	Recombinant Human IL-31 RA Protein is expressed from HEK293 with His tag at the C-Terminus.
	It contains Ala20-Glu519.
Accession	Q8NI17-1
Molecular Weight	The protein has a predicted MW of 58.2 kDa. Due to glycosylation, the protein migrates to 80-110 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1 EU per μg by the LAL method.
Purity	>95% as determined by Bis-Tris PAGE
	>90% as determined by HPLC

#### Formulation and Storage

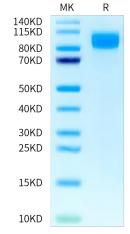
Formulation	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt80°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 (OSMR beta). OSMR beta 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.

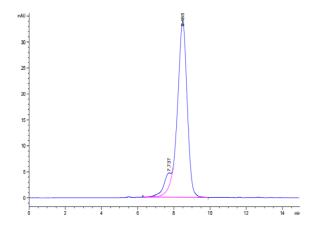
# **Assay Data**

#### **Bis-Tris PAGE**



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

#### **SEC-HPLC**



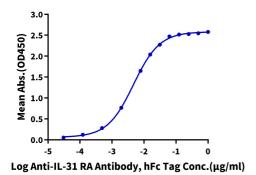
The purity of Human IL-31 RA is greater than 90% as determined by SEC-HPLC.



# **Assay Data**

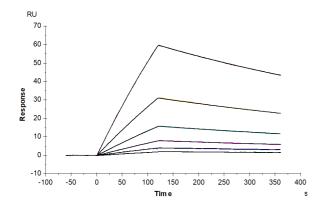
#### **ELISA Data**

# **Human IL-31 RA, His Tag ELISA** 0.1μg Human IL-31 RA, His Tag Per Well



Immobilized Human IL-31 RA, His Tag at 1  $\mu$ g/ml (100  $\mu$ l/well) on the plate. Dose response curve for Anti-IL-31 RA Antibody, hFc Tag with the EC50 of 4.7 ng/ml determined by ELISA (QC Test).

#### **SPR Data**



Human IL-31, His Tag immobilized on CM5 Chip can bind Human IL-31 RA, His Tag with an affinity constant of 125.61 nM as determined in SPR assay (Biacore T200).