



## Synonym

IL-11 R alpha,IL-11 RA,IL11RA,Interleukin-11 receptor subunit alpha,IL-11 receptor subunit alpha,IL-11R subunit alpha,IL-11R-alpha

# Source

Human IL-11 R alpha, His Tag(ILR-H52H5) is expressed from human 293 cells (HEK293). It contains AA Ser 24 - Ala 370 (Accession # Q14626-1). Predicted N-terminus: Ser 24

#### **Molecular Characterization**

IL-11 RA(Ser 24 - Ala 370) Q14626-1

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 39.6 kDa. The protein migrates as 47-52 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### **Endotoxin**

Less than 1.0 EU per µg by the LAL method / rFC method.

## **Purity**

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

## **Formulation**

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

#### Storage

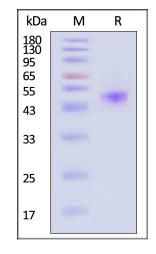
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

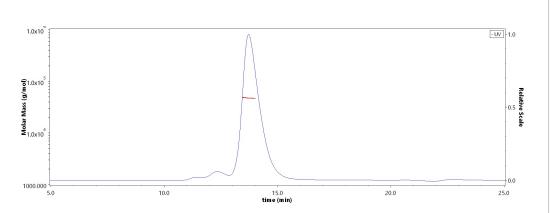
# **SDS-PAGE**



Human IL-11 R alpha, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

## **Bioactivity-ELISA**

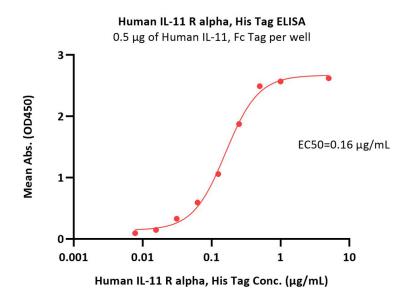
### **SEC-MALS**



The purity of Human IL-11 R alpha, His Tag (Cat. No. ILR-H52H5) is more than 90% and the molecular weight of this protein is around 42-56 kDa verified by SEC-MALS.

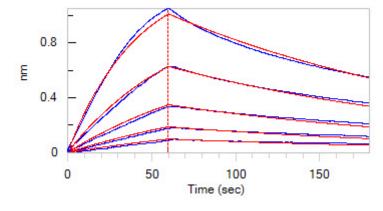
<u>Report</u>





Immobilized Human IL-11, Fc Tag (Cat. No. IL1-H5269) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Human IL-11 R alpha, His Tag (Cat. No. ILR-H52H5) with a linear range of 0.008-0.5  $\mu$ g/mL (Routinely tested).

## **Bioactivity-BLI**



Loaded Biotinylated Human IL-11, His, Avitag (Cat. No. IL1-H82E3) on SA Biosensor, can bind Human IL-11 R alpha, His Tag (Cat. No. ILR-H52H5) with an affinity constant of 27 nM as determined in BLI assay (ForteBio Octet Red96e) (QC tested).

# Background

Receptor for interleukin-11 (IL11). The receptor systems for IL6, LIF, OSM, CNTF, IL11 and CT1 can utilize IL6ST for initiating signal transmission. The IL11/IL11RA/IL6ST complex may be involved in the control of proliferation and/or differentiation of skeletogenic progenitor or other mesenchymal cells (Probable). Essential for the normal development of craniofacial bones and teeth. Restricts suture fusion and tooth number. Soluble form of IL11 receptor (sIL11RA) that acts as an agonist of IL11 activity. The IL11:sIL11RA complex binds to IL6ST/gp130 on cell surfaces and induces signaling also on cells that do not express membrane-bound IL11RA in a process called IL11 trans-signaling.

