

# Rat IL-2 R alpha / CD25 Protein, His Tag (MALS verified)

Catalog # ILA-R52H4



BIOSYSTEMS  
**Acro**

## Synonym

IL2RA, CD25, p55, IL2-RA, IL-2-RA

## Source

Rat IL-2 R alpha Protein, His Tag (ILA-R52H4) is expressed from human 293 cells (HEK293). It contains AA Glu 22 - Gln 235 (Accession # [P26897](#)).

Predicted N-terminus: Glu 22

## Molecular Characterization

IL-2 R alpha(Glu 22 - Gln 235) P26897	Poly-his
--	----------

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

The protein has a calculated MW of 26.3 kDa. The protein migrates as 43-55 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

>90% 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.**

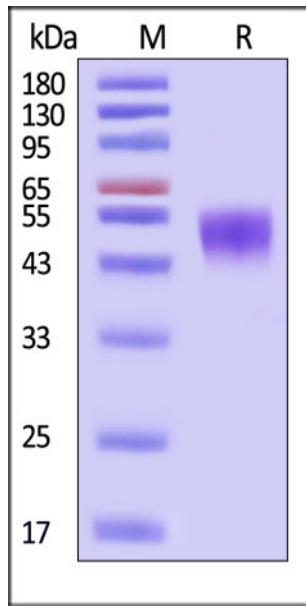
This product is stable after storage at:

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

## ACRO Quality Management System

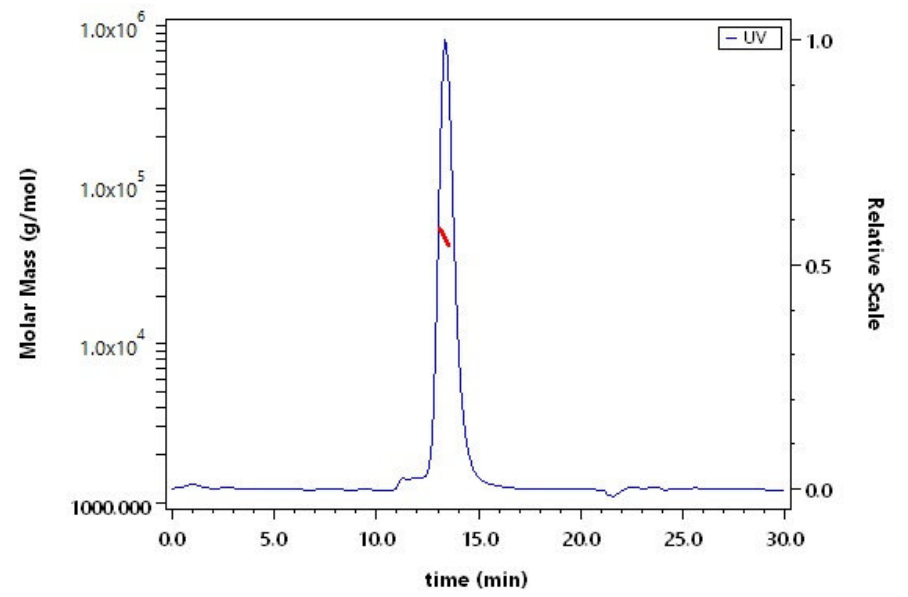
- [QMS\(ISO, GMP\)](#)
- [Quality Advantages](#)
- [Quality Control Process](#)

## SDS-PAGE



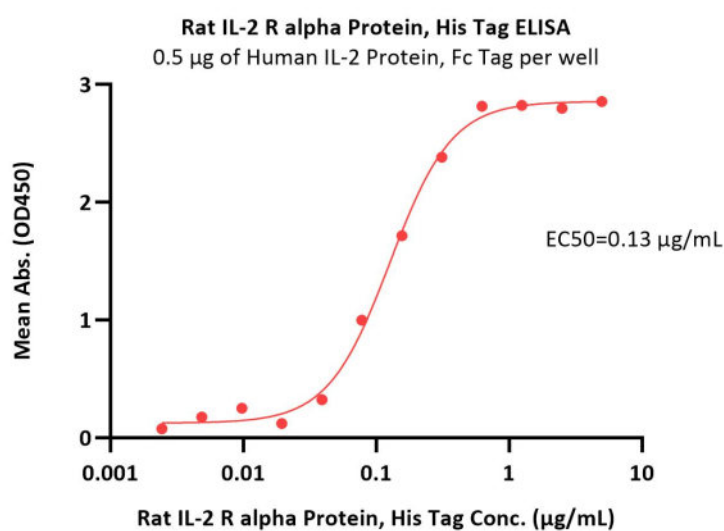
Rat IL-2 R alpha Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

## SEC-MALS

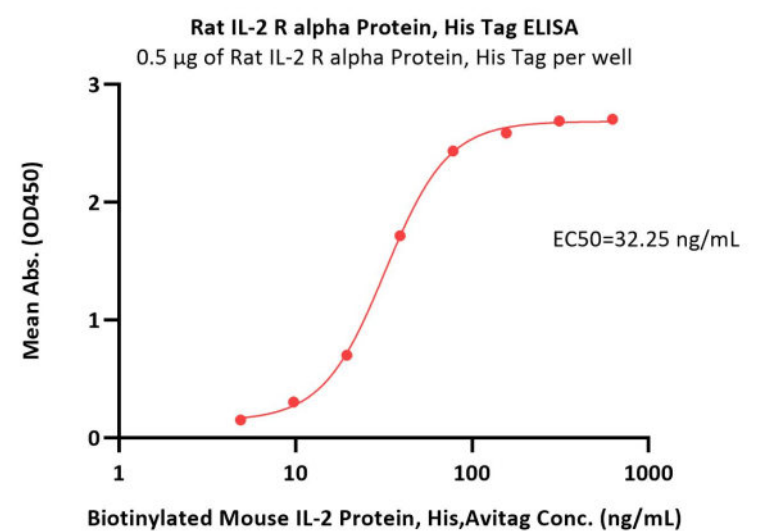


The purity of Rat IL-2 R alpha Protein, His Tag (Cat. No. ILA-R52H4) is more than 90% and the molecular weight of this protein is around 40-55 kDa verified by SEC-MALS.

## Bioactivity-ELISA

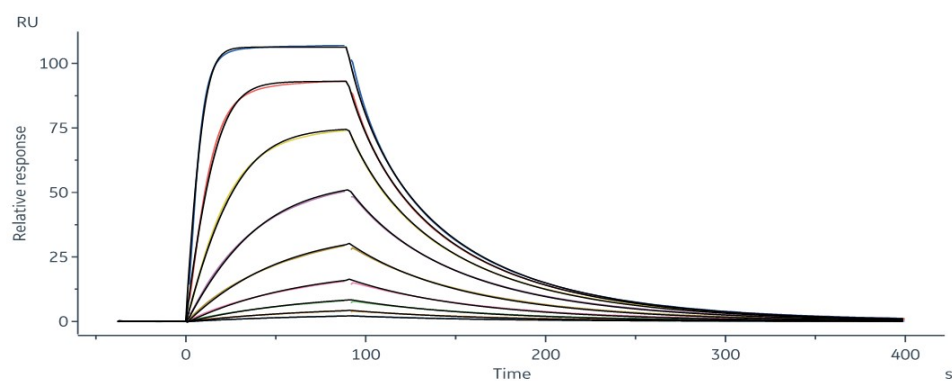


Immobilized Human IL-2 Protein, Fc Tag (Cat. No. IL2-H5269) at 5 µg/mL (100 µL/well) can bind Rat IL-2 R alpha Protein, His Tag (Cat. No. ILA-R52H4) with a linear range of 0.002-0.313 µg/mL (QC tested).



Immobilized Rat IL-2 R alpha Protein, His Tag (Cat. No. ILA-R52H4) at 5 µg/mL (100 µL/well) can bind Biotinylated Mouse IL-2 Protein, His, Avitag (Cat. No. IL2-M82Q3) with a linear range of 5-78 ng/mL (Routinely tested).

## Bioactivity-SPR



Rat IL-2 R alpha Protein, His Tag (Cat. No. ILA-R52H4) immobilized on CM5 Chip can bind Rat IL-2 Protein, His Tag (Cat. No. IL2-R52H8) with an affinity constant of 14.56 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

## Background

Interleukin-2 receptor subunit alpha (IL2RA) is also known as IL-2R subunit alpha, IL-2-RA, IL2-RA, TAC antigen, p55, CD antigen CD25, is a type I transmembrane glycoprotein. IL2RA is expressed on activated T cells and regulatory T cells, and is capable of binding IL2 with low affinity by itself. However, a ligand-induced high affinity heterotrimeric receptor complex is produced when IL2RA is associated non-covalently with the IL2 receptor beta and gamma chain, and

subsequently initiates the intracellular signal pathways such as MAPK or JAK/STAT. On dendritic cells (DC), CD25 has been previously regarded as an activation marker, while both murine and human DC can express CD25, they do not express the beta-chain of the IL-2 receptor, which is indispensable for the execution of IL-2 signaling.



[www.acrobiosystems.com](http://www.acrobiosystems.com)