

Cynomolgus IL-1RL1 / ST2 Protein, His Tag, low endotoxin (MALS & SPR verified)

Catalog # IL1-C52H4



BIOSYSTEMS
Acro

Synonyms

IL1RL1, DER4, FIT-1, IL33R, ST2, ST2L, ST2V, T1

Source

Cynomolgus IL-1RL1 Protein, His Tag (IL1-C52H4) is expressed from human 293 cells (HEK293).

Molecular Characterization

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

The protein has a calculated MW of 37.1 kDa. The protein migrates as 50-65 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.01 EU per µg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

>95% 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.

Shipping and Storage

This product is shipped at ambient temperature.

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

Please avoid repeated freeze-thaw cycles.

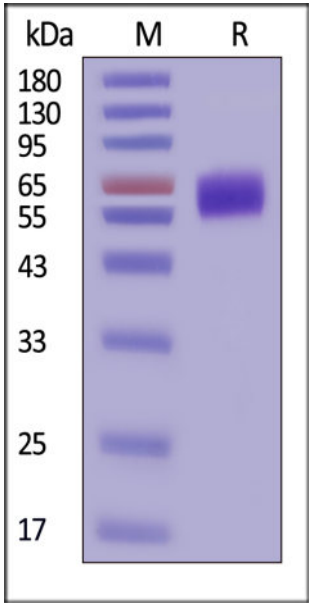
This product is stable after storage at:

- -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

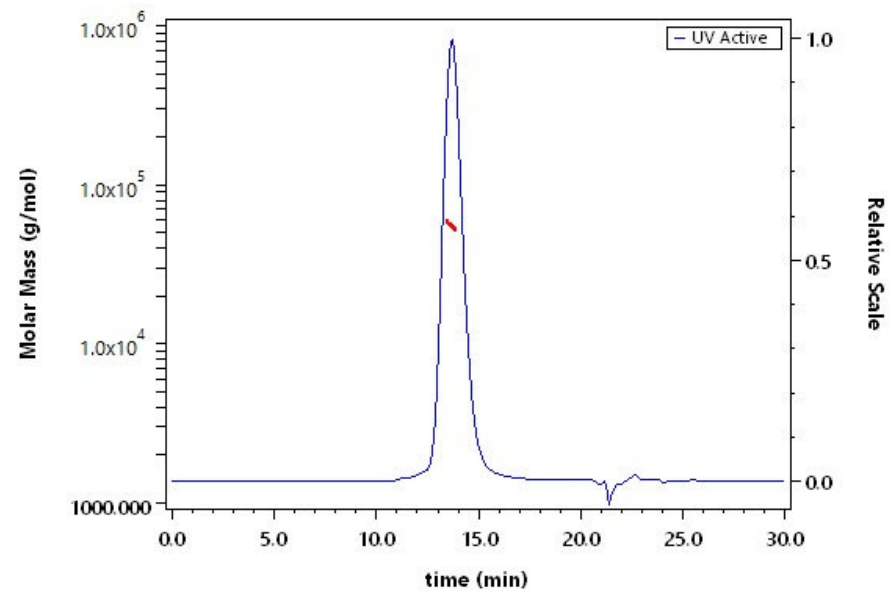
- [QMS\(ISO, GMP\)](#)
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



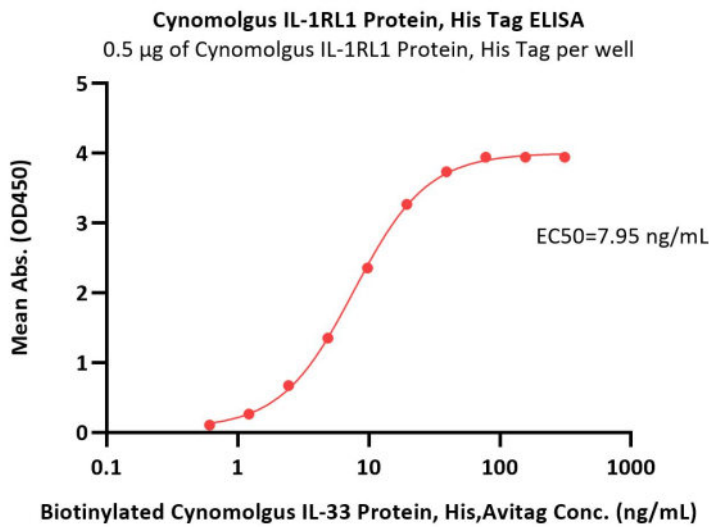
Cynomolgus IL-1RL1 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



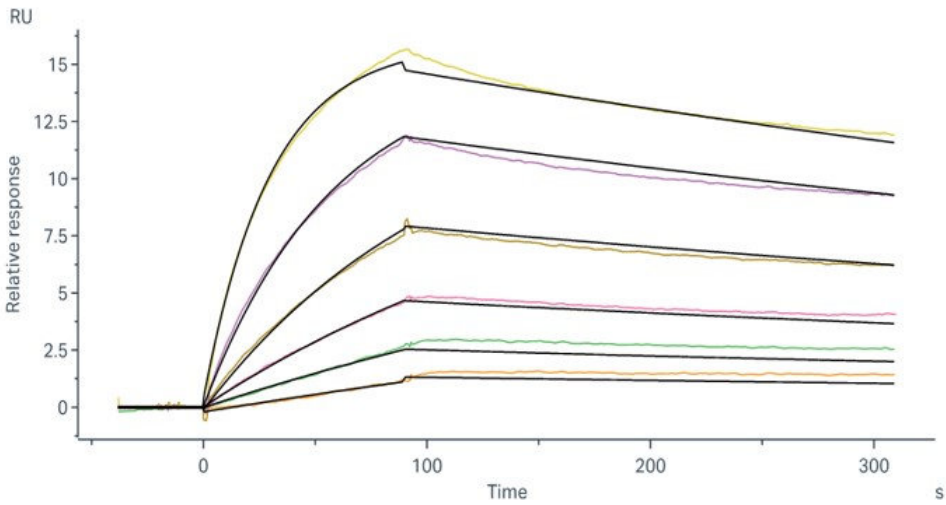
The purity of Cynomolgus IL-1RL1 Protein, His Tag (Cat. No. IL1-C52H4) is more than 95% and the molecular weight of this protein is around 50-70 kDa verified by SEC-MALS.

Activity-ELISA



Immobilized Cynomolgus IL-1RL1 Protein, His Tag (Cat. No. IL1-C52H4) at 5 µg/mL (100 µL/well) can bind Biotinylated Cynomolgus IL-33 Protein, His,Avitag (Cat. No. IL3-C82E3) with a linear range of 0.6-20 ng/mL (QC tested).

Activity-SPR



Cynomolgus IL-1RL1 Protein, His Tag(Cat. No. IL1-C52H4) immobilized on CM5 Chip can bind Cynomolgus IL-33, His Tag (Cat. No. IL3-C5245) with an affinity constant of 8.58 nM as determined in a SPR assay (Biacore 8K) (QC tested).

Background

Interleukin 1 receptor-like 1 (IL1RL1), also known as ST2, DER4, FIT-1, or IL33R, belongs to the interleukin-1 receptor family. Its transmembrane form ST2L contains three immunoglobulin-like C2-type domains and one TIR domain. IL1RL1 (ST2L) serves as the ligand-binding subunit of the receptor for interleukin-33

(IL-33), which also requires IL-1R accessory protein (IL-1RAcP) for signaling. Upon IL-33 stimulation, the receptor complex recruits MYD88, IRAK1, IRAK4, and TRAF6, leading to the phosphorylation of MAPK3/ERK1, MAPK1/ERK2, MAPK14 (p38), and MAPK8 (JNK). IL1RL1 is involved in Th2-type helper T-cell function. The intracellular TIR domain of IL1RL1 can interact with MYD88, IRAK1, IRAK4, and TRAF6.



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