

Synonym

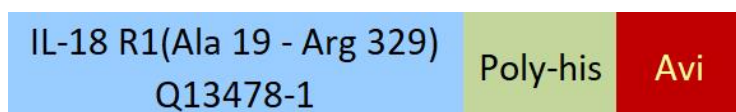
IL18R1,IL1RRP,CD218a,IL18Ra

Source

Biotinylated Human IL-18 R1, His,Avitag(IL1-H82E7) is expressed from human 293 cells (HEK293). It contains AA Ala 19 - Arg 329 (Accession # [Q13478-1](#)).

Predicted N-terminus: Ala 19

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 39.3 kDa. The protein migrates as 55-65 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per µg by the LAL 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

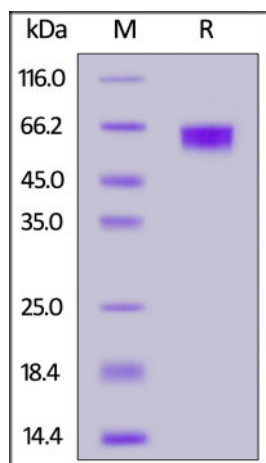
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

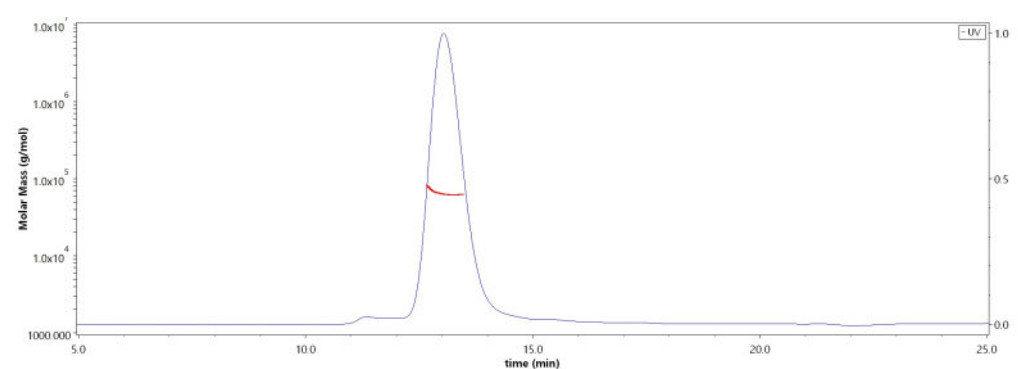
SDS-PAGE



Biotinylated Human IL-18 R1, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

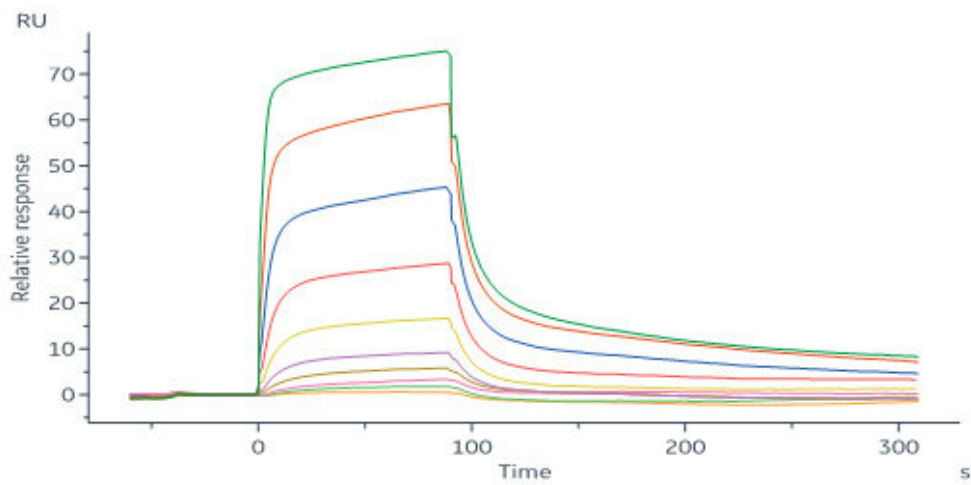
Bioactivity-SPR

SEC-MALS

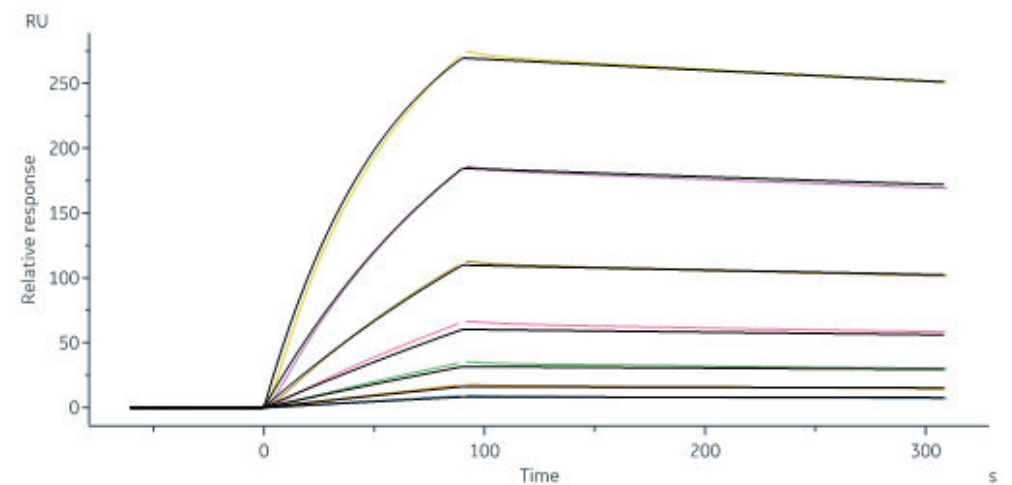


The purity of Biotinylated Human IL-18 R1, His,Avitag (Cat. No. IL1-H82E7) is more than 90% and the molecular weight of this protein is around 65-75 kDa verified by SEC-MALS.

[Report](#)



Biotinylated Human IL-18 R1, His,Avitag (Cat. No. IL1-H82E7) captured on Biotin CAP-Series S Sensor Chip can bind Human IL-18, Tag Free with an affinity constant of 1.49 μ M as determined in a SPR assay (Biacore 8K) (QC tested).



Biotinylated Human IL-18 R1, His,Avitag (Cat. No. IL1-H82E7) captured on Biotin CAP-Series S Sensor Chip can bind Human IL-18, Tag Free (Premixed with Human IL-18 R beta / IL-1 R7, Fc Tag, Cat. No. ILB-H5256) with an affinity constant of 5.87 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

Interleukin-18 receptor 1 (IL18R1) is also known as CD218 antigen-like family member A (CD218a), IL1 receptor-related protein (IL-1Rrp or IL1R-rp), CDw218a, IL18Ra, IL1RRP, which belongs to the interleukin-1 receptor family. IL18R1 contains three Ig-like C2-type (immunoglobulin-like) domains and one TIR domain. IL18R1 is receptor for interleukin 18 (IL-18). IL18R1 binds to the agonist leads to the activation of NF-kappa-B, but does not bind IL1A/interleukin-1 alpha or IL1B/interleukin-1 beta.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.