

Biotinylated Human Prolactin R / PRLR Protein, His,Avitag™ (MALs verified)

Catalog # PRR-H82E3



Synonym

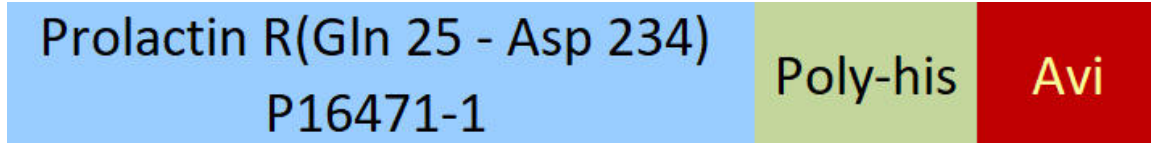
Prolactin R, PRLR, PRL-R

Source

Biotinylated Human Prolactin R Protein, His,Avitag (PRR-H82E3) is expressed from human 293 cells (HEK293). It contains AA Gln 25 - Asp 234 (Accession # [P16471-1](#)).

Predicted N-terminus: Gln 25

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 28.0 kDa. The protein migrates as 33-38 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) 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.

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.

Storage

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

Please avoid repeated freeze-thaw cycles.

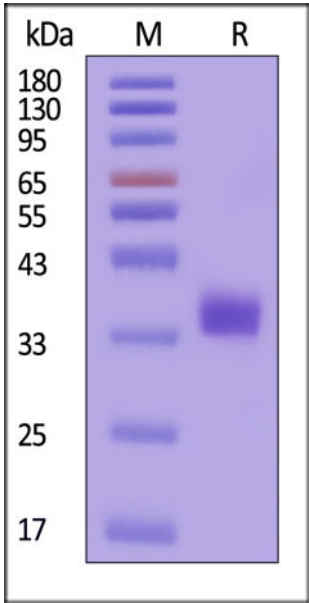
This product is stable after storage at:

- -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

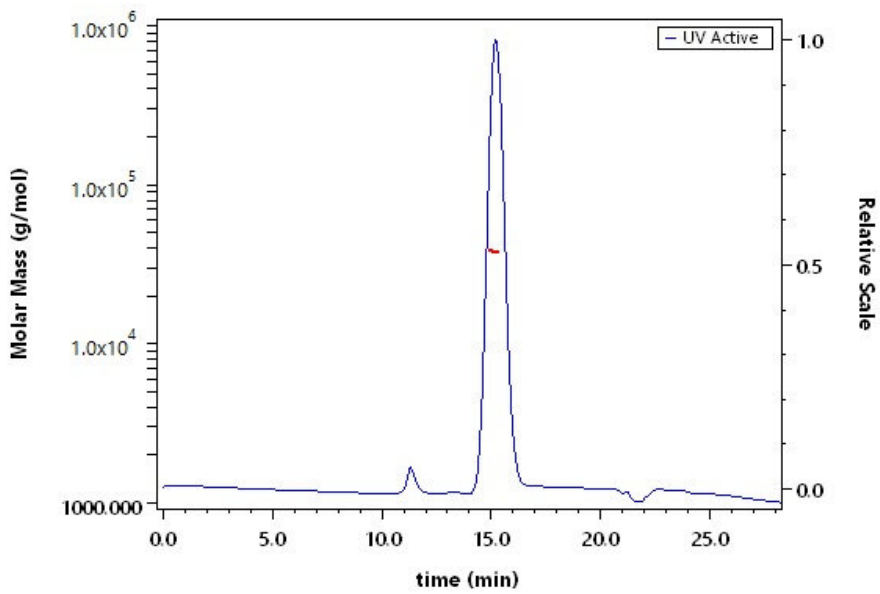
- [QMS\(ISO, GMP\)](#)
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



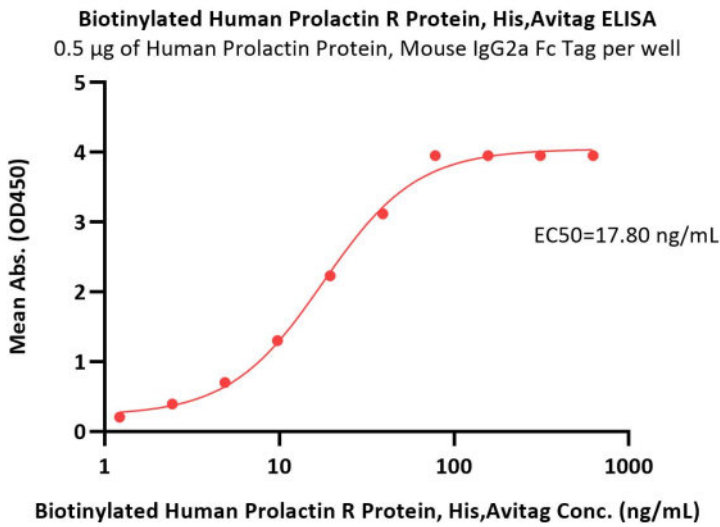
Biotinylated Human Prolactin R Protein, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



The purity of Biotinylated Human Prolactin R Protein, His,Avitag (Cat. No. PRR-H82E3) is more than 95% and the molecular weight of this protein is around 30-43 kDa verified by SEC-MALS.

Bioactivity-ELISA



Immobilized Human Prolactin Protein, Mouse IgG2a Fc Tag (Cat. No. PRN-H5257) at 5 µg/mL (100 µL/well) can bind Biotinylated Human Prolactin R Protein, His,Avitag (Cat. No. PRR-H82E3) with a linear range of 1-39 ng/mL (QC tested).

Background

The prolactin receptor (PRLR) is a transmembrane protein belonging to the class I cytokine receptor superfamily, widely expressed in mammary gland, reproductive organs, liver, and brain. Signal activation is initiated when a single prolactin (PRL) molecule binds to this pre-dimerized PRLR, inducing a specific conformational change. This triggers the associated JAK2 kinases to phosphorylate each other and the receptor, ultimately leading to the recruitment and activation of downstream STAT5 transcription factors. This precise mechanism governs essential physiological processes, including lactation, reproduction, metabolism, and immune function, and its dysregulation is implicated in diseases such as certain cancers and endometriosis.



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