

Synonym

PRL, Prolactin

Source

Biotinylated Human Prolactin, Fc,Avitag(PRN-H82F7) is expressed from human 293 cells (HEK293). It contains AA Leu 29 - Cys 227 (Accession # [Q5THQ0-1](#)).

Predicted N-terminus: Leu 29

Molecular Characterization

Prolactin(Leu 29 - Cys 227) Q5THQ0-1	Fc(Pro 100 - Lys 330) P01857	Avi
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This protein carries a human IgG1 Fc tag at the C-terminus, followed by an Avi tag (Avitag™)

The protein has a calculated MW of 51.2 kDa. The protein migrates as 57-66 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.

Formulation

Lyophilized from 0.22 µm filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5 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.

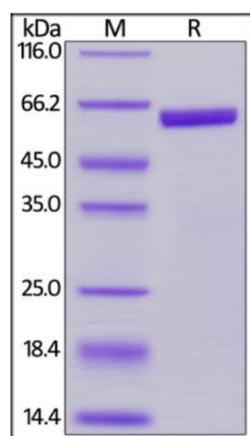
Storage

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

Please avoid repeated freeze-thaw cycles.

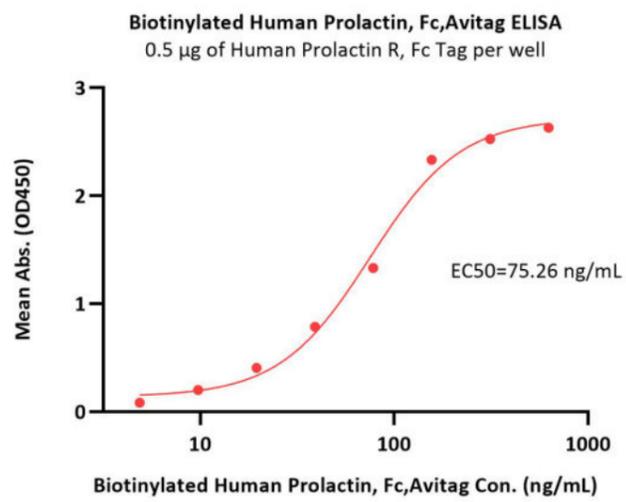
This product is stable after storage at:

- -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 Prolactin, Fc,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-ELISA



Immobilized Human Prolactin R, Fc Tag (Cat. No. PRP-H5251) at 5 µg/mL (100 µL/well) can bind Biotinylated Human Prolactin, Fc,Avitag (Cat. No. PRN-H82F7) with a linear range of 5-156 ng/mL (QC tested).

Background

Prolactin (gene name PRL) is a secreted neuroendocrine pituitary hormone that acts primarily on the mammary gland to promote lactation, but has pleiotropic effects in both males and females. Prolactin is synthesized as a prohormone. Following cleavage of the signal peptide, the length of the mature hormone is between 194 and 199 amino acids, depending on species. Hormone structure is stabilized by three intramolecular disulfide bonds. Excessive secretion of prolactin - hyperprolactinemia - is a relative common disorder in humans. This condition has numerous causes, including prolactin-secreting tumors and therapy with certain drugs. The prolactin receptor (gene name PRLR) is a transmembrane type I glycoprotein that belongs to the cytokine hematopoietic receptor family. Expression of the prolactin receptor is widespread. Each prolactin molecule is thought to bind two receptor molecules

Clinical and Translational Updates

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