

Synonym

PRL,Prolactin

Source

Human Prolactin Protein, Mouse IgG2a Fc Tag(PRN-H5257) 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)	mFc(Glu 98 - Lys 330)
Q5THQ0-1	P01863

This protein carries a mouse IgG2a Fc tag at the C-terminus

The protein has a calculated MW of 49.8 kDa. The protein migrates as 50-55 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.1 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

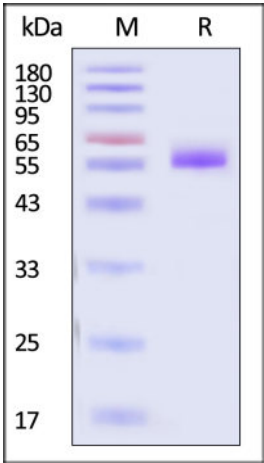
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

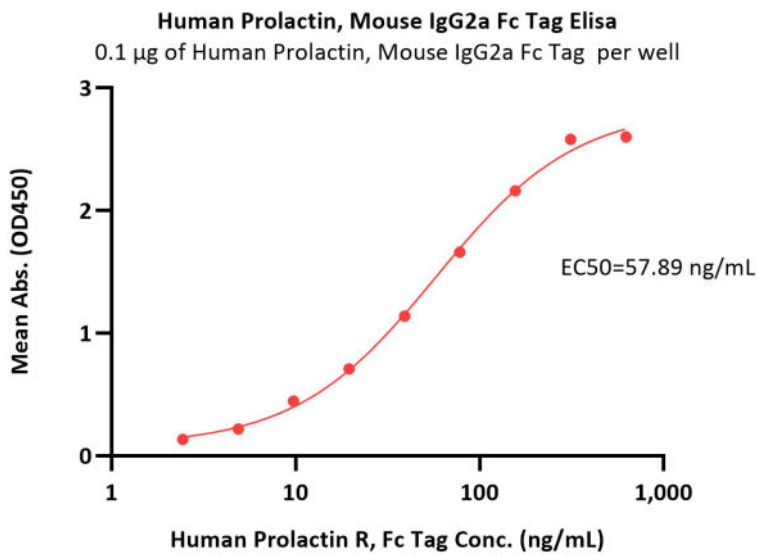
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human Prolactin Protein, Mouse IgG2a Fc 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](#)).

Bioactivity-ELISA



Immobilized Human Prolactin, Mouse IgG2a Fc Tag, low endotoxin (Cat. No. PRN-H5257) at 1 µg/mL (100 µL/well) can bind Human Prolactin R / PRLR Protein, Fc Tag (Cat. No. PRP-H5251) with a linear range of 2-78 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.