

Synonym

Prolactin R,PRLR,PRL-R

SourceHuman Prolactin R, Fc Tag(PRP-H5251) is expressed from human 293 cells (HEK293). It contains AA Gln 25 - Asp 234 (Accession # [P16471-1](#)).

Predicted N-terminus: Gln 25

Molecular Characterization

| | |
|---|---------------------------------|
| Prolactin R(Gln 25 - Asp 234) P16471-1 | Fc(Pro 100 - Lys 330) P01857 |
|---|---------------------------------|

This protein carries a human IgG1 Fc tag at the C-terminus

The protein has a calculated MW of 51.0 kDa. The protein migrates as 64 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

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.

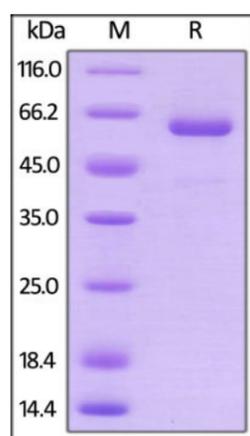
*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.***Storage**

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

Please avoid repeated freeze-thaw cycles.

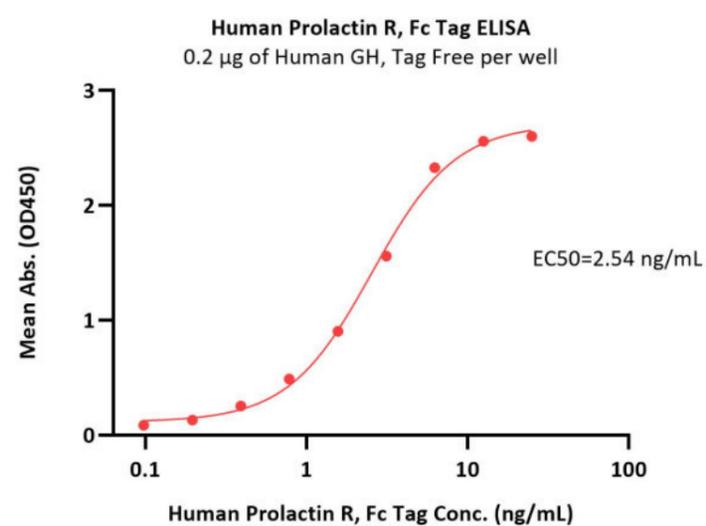
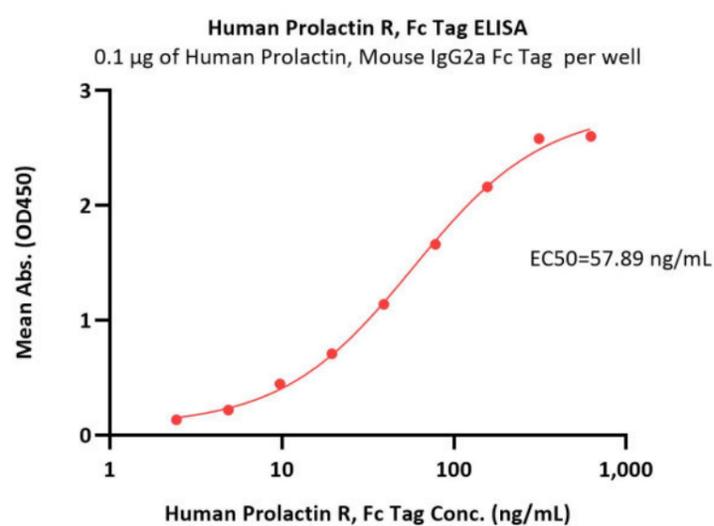
This product is stable after storage at:

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

SDS-PAGE

Human Prolactin R, 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%.

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).

Immobilized Human GH, Tag Free at 2 µg/mL (100 µL/well) can bind Human Prolactin R, Fc Tag (Cat. No. PRP-H5251) with a linear range of 0.4-6 ng/mL (Routinely tested).

Background

As a transmembrane receptor, the prolactin receptor (PRL-R) interacts with prolactin. In addition, the PRL-R also binds and is activated by growth hormone (GH) and human placental lactogen (hPL). Preclinical investigations, epidemiological studies and analyses of tissue specimens from patients strongly support the contribution of prolactin receptor (PRLR) signaling to breast and prostate tumorigenesis and cancer progression. Moreover, The PRLR has been found to be essential for lobuloalveolar maturation of the mammary glands during pregnancy, as evidenced by the fact that PRLR knockout mice show severely impaired development of lobuloalveolar structures.

Clinical and Translational Updates

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