

#### **Synonym**

Prolactin R,PRLR,PRL-R

#### Source

Human 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) Fc(Pro 100 - Lys 330)
P16471-1 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 when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> 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**

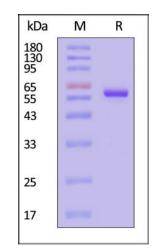
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

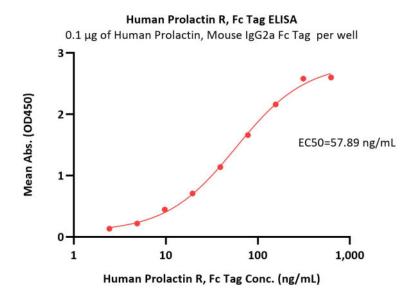
# **Bioactivity-ELISA**



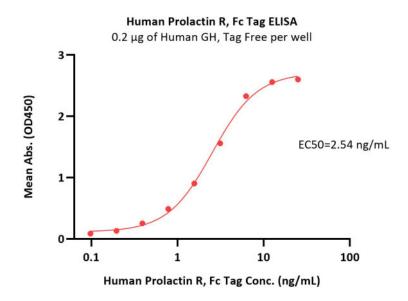
# Human Prolactin R / PRLR Protein, Fc Tag

Catalog # PRP-H5251





Immobilized Human Prolactin, Mouse IgG2a Fc Tag, low endotoxin (Cat. No. PRN-H5257) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Human Prolactin R 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  $\mu$ g/mL (100  $\mu$ L/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**

