

# Recombinant Rat Prolactin Receptor (PRL-R)

<b>CATALOG #:</b>	4991-50	10 µg
	4991-50	50 µg
	4991-1000	1 mg
<b>SYNONYMS:</b>	PRL-R, Prolactin receptor, Lactogen receptor, Prlr	
<b>SOURCE:</b>	<i>E. coli</i>	
<b>PURITY:</b>	>97% by SDS-PAGE and HPLC analyses Endotoxin level is <0.1 ng/µg of rat PRL-R	
<b>MOLECULAR WT:</b>	24.12 kDa	
<b>FORM:</b>	Lyophilized from a concentrated (1 mg/ml) solution with 0.0045 mM NaHCO <sub>3</sub>	

**RECONSTITUTION:**

Centrifuge the vial prior to opening. Reconstitute in sterile dH<sub>2</sub>O to a concentration of 0.1 -1 mg/ml and let the lyophilized pellet dissolve completely. This solution can then be diluted into other aqueous buffers and stored at 4°C for 1 week or -20°C for future use.

**STORAGE CONDITIONS:**

The lyophilized rat PRL-R is best-stored desiccated below 0°C. Reconstituted PRL-R should be stored in working aliquots at -20°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**DESCRIPTION:**

Prolactin is a pituitary hormone that plays a role in the stimulation of milk production, salt and water regulation, growth, development and reproduction. The primary step in its action is the binding to a specific membrane receptor (prolactin receptor) which belongs to the superfamily of class 1 cytokine receptors. Prolactin is a hormone involved in a range of significant functions including ion transport and osmoregulation, stimulation of milk, protein synthesis as well as the regulation of numerous reproductive functions. Prolactin exerts its influence on different cell types through a signal transduction pathway which begins with the binding of the hormone to a transmembrane Prolactin receptor. PRLR varies in size (short and long forms) with tissue source and species, from ~40 kDa to 100 kDa. Recombinant human Prolactin Receptor (Extra Cellular Domain) produced in *E. coli* is a non-glycosylated, Polypeptide chain containing 206 amino acids and having a molecular mass of 24.12 kDa.

**BIOLOGICAL ACTIVITY:**

Determined by the dose-dependent inhibition of Prolactin stimulated proliferation of Nb2 cells and by high affinity binding of ovine Prolactin and other lactogenic hormones.

**RELATED PRODUCTS:**

## Apoptosis Detection Kits &amp; Reagents

- Annexin V Kits & Bulk Reagents
- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

## Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

## Cell Proliferation &amp; Senescence

- Quick Cell Proliferation Assay Kit
- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
- LDH-Cytotoxicity Assay Kit
- Bioluminescence Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

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- HAT Colorimetric Assay Kit & Reagents
- DNA Damage Quantification Kit
- Glutathione & Nitric Oxide Fluorometric & Colorimetric Assay Kits

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- cAMP & cGMP Assay Kits
- Akt & JNK Activity Assay Kits
- Beta-Secretase Activity Assay Kit

## Adipocyte &amp; Lipid Transfer

- Recombinant Adiponectin, Survivin, & Leptin
- CETP Activity Assay & Drug Discovery Kits
- PLTP Activity Assay & Drug Discovery Kits
- Total Cholesterol Quantification Kit

## Molecular Biology &amp; Reporter Assays

- siRNA Vectors
- Cloning Insert Quick Screening Kit
- Mitochondrial & Genomic DNA Isolation Kits
- 5 Minutes DNA Ligation Kit
- 20 Minutes Gel Staining/Destaining Kit
- β -Galactosidase Staining Kit & Luciferase Reporter Assay Kit

## Growth Factors and Cytokines

## Monoclonal and Polyclonal Antibodies