

## GFR11AF Recombinant Rat Prolactin (Animal-Free)

### Description

Prolactin is a hormone that is produced and secreted by the pituitary gland. Prolactin acts in an endocrine, paracrine, and autocrine manner. The prolactin receptor (PRLR) is expressed on many cell types, including cells of the reproductive organs, central nervous system, and breast cancer. Prolactin signal transduction occurs via JAK kinase signaling pathways. The primary function of prolactin is to regulate lactation, but prolactin also plays functional roles in the immune system and during cell growth, apoptosis, and differentiation.

This product is produced with no animal derived raw products. All processing and handling employs animal free equipment and animal free protocols.

<b>Length</b>	200 aa
<b>Molecular Weight</b>	23.0 kDa
<b>Source</b>	E. coli
<b>Accession Number</b>	P01236
<b>Purity</b>	≥95% determined by reducing and non-reducing SDS-PAGE

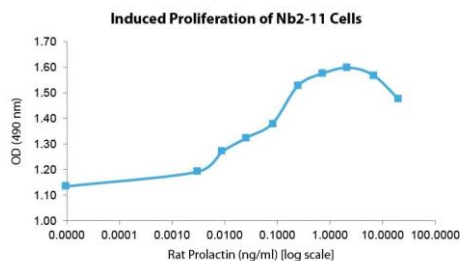
### Specifications

<b>Alternative Names</b>	PRL, LTH, mamotropin, luterotrophic hormone, lutetropin
<b>Biological Activity</b>	Rat Prolactin (Animal-Free) is fully biologically active when compared to standard. The activity is determined by the ability to induce NB2-11 cells proliferation.
<b>Endotoxin Level</b>	≤1.00 EU/μg as measured by kinetic LAL
<b>Formulation</b>	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)
<b>AA Sequence</b>	MLPICPGGAA RCQVTLRDLF DRAVVLSHYI HNLSSSEMFSE FDKRYTHGRG FITKAINSCH TSSLATPEDK EQAQMNQKD FLSLIVSILR SWNEPLYHLV TEVRGMQEAP EAILSKAIVEI EEQTKRLLEG MELIVSQVHP ETKENEIYPV WSGLPQLQMA DEESRLSAYY NLLHCLRRDS HKIDNYLKLL KCRIIHNNNC

### Preparation and Storage

<b>Reconstitution</b>	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/ml, which can be further diluted into other aqueous solutions.
<b>Stability and Storage</b>	12 months from date of receipt when stored at -20°C to -80°C as supplied. 1 month when stored at 4°C after reconstituting as directed. 3 months when stored at -20°C to -80°C after reconstituting as directed.

### Data



Induced proliferation of NB2-11 cells assay for Rat Prolactin. Cell proliferation was measured to calculate the ED50.