

# Recombinant human Prolactin protein

Catalog Number: PRO0501

## PRODUCT INFORMATION

---

### Expression system

E.coli

### Domain

29-227aa

### UniProt No.

P01236

### NCBI Accession No.

NP\_000939.1

### Alternative Names

PRL, Prolactin, Lactogenic hormone, Luteotropic hormone, Mamotropin, OTTHuMP00000017727, Prolactin precursor.

## PRODUCT SPECIFICATION

---

### Molecular Weight

23 kDa (200aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4)

### Purity

> 95% by SDS-PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Biological Activity

Measured in a cell proliferation assay using Nb2-11 Rat lymphoma cells. The ED50 range  $\leq$  0.5ng/ml.

### Tag

Non-Tagged

### Application

SDS-PAGE, Bioactivity

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

---

# Recombinant human Prolactin protein

Catalog Number: PRO0501

## Description

Prolactin is a hormone synthesised and secreted by lactotrope cells in the adenohypophysis (anterior pituitary gland). Prolactin has many effects, the most significant of which is to stimulate the mammary glands to produce milk (lactation). Increased serum prolactin during pregnancy causes enlargement of the mammary glands of the breasts and increases the production of milk. Recently, prolactin has demonstrated broader roles in breast cancer development, regulation of reproductive function, and immunoregulation. Prolactin was expressed in *E. coli* and purified by conventional chromatography, after refolding of the isolated inclusion bodies in a renaturation buffer.

## Amino acid Sequence

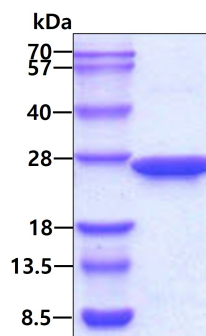
MLPICPGGAA RCQVTLRDLF DRAVVLSHYI HNLSSSEMFS EFDKRYTHGRG FITKAINSCH TSSLATPEDK EQAQQMNQKD  
 FLSLIVSILR SWNEPLYHLV TEVRGMQEAP EAILS KAVEI EEQTKRLLG MELIVSQVHP ETKE NEIYPV WSGLP SLQMA  
 DEESRLSAYY NLLHCLRRDS HKIDNYL KLL KCRIIHN NNC

## General References

Ben-jonathan N., et al. (1996) *Endocr Rev.* 17(6):639-69.  
 Cooke NE., et al. (1981) *J. Biol. Chem.* 256, 4007-4016.  
 Goffin V., et al. (1999) *Mol Cell Endocrinol.* 151, 79-87.

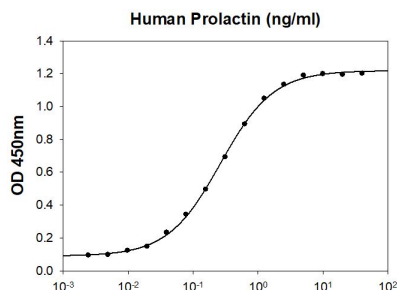
## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

### Biological Activity



Human Prolactin in a cell proliferation assay using Nb2-11 Rat lymphoma cells. The ED50 range  $\leq 0.5$ ng/ml.