

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

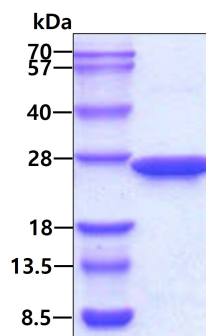
MLPICGGAA RCQVTLRDLF DRAVVLSHYI HNLSSSEMFS EFDKRYTHGRG FITKAINSCH TSSLATPEDK EQAQQMNQKD
 FLSLIVSILR SWNEPLYHLV TEVRGMQEAP EAILS KAVEI EEQTKRLLG MELIVSQVHP ETKE NEIYPV WSGLP SLQMA
 DEESRLSAYY NLLHCLRRDS HKIDNYLKLL KCRIIHNNNC

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.

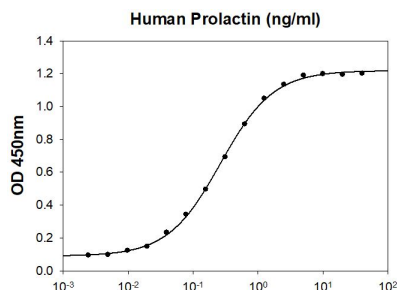
DATA

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 ≤ 0.5 ng/ml.