

Active Recombinant Human Prolactin

Cat. No. PRL-56H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Human Prolactin produced in <i>E. Coli</i> is a single, non-glycosylated polypeptide chain containing 200 amino acids and having a molecular mass of 23007 Dalton. The Prolactin is purified by proprietary chromatographic techniques.
Species	Human
Source	E.coli
ProteinLength	28-227 a.a.
Description	Prolactin is a neuroendocrine hormone synthesized primarily by the pituitary gland but also a variety of other cell types including the placenta, brain and uterus. Its primary function is to promote and maintain lactation but has also been shown to have a role in breast cancer development, regulation of reproductive function and immunoregulation.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Formulation	The protein was lyophilized from a concentrated (1 mg/ml) solution with 10 mM sodium Phosphate buffer pH=8 and 50 mM NaCl.
Solubility	It is recommended to reconstitute the lyophilized Prolactin in sterile 18 MΩ-cm H ₂ O

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not less than 100 g/ml, which can then be further diluted to other aqueous solutions.

Amino Acid Sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Leu-Pro-Ile-Cys.

Biological Activity

The ED₅₀as determined by the dose-dependant stimulation of the proliferation of rat lymphoma, Nb2-11 was found to be < 0.065 ng/ml.

Storage

Lyophilized Prolactin although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Prolactin should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

GENE INFORMATION

Gene Name

[PRL prolactin \[Homo sapiens \]](#)

Synonyms

PRL; prolactin; OTTHUMP00000017727

Gene ID

[5617](#)

mRNA Refseq

[NM_000948](#)

Protein Refseq

[NP_000939](#)

MIM

[176760](#)

UniProt ID

[P01236](#)

Chromosome

6p22.2-p21.3

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Location**Pathway**

Cytokine-cytokine receptor interaction; Jak-STAT signaling pathway; Neuroactive ligand-receptor interaction

Function

hormone activity; prolactin receptor binding

Structure of the hormone prolactin

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