

## Prolactin Ovine

**Description:** Prolactin Ovine Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 199 amino acids and having a molecular mass of 23 kDa. The Prolactin n is purified by proprietary chromatographic techniques.

**Synonyms:** Mamotropin, Luteotropic hormone, Luteotropin, PRL.

**Source:** Escherichia Coli.

**Physical Appearance:** Sterile Filtered White lyophilized (freeze-dried) powder.

**Amino Acid Sequence:** The sequence of the first five N-terminal amino acids was determined and was found to be Ala-Thr-Pro-Val-Cys-Pro.

**Purity:** Greater than 98.0% as determined by: (a) Analysis by SEC-HPLC. (b) Analysis by SDS-PAGE.

**Formulation:**

The protein was lyophilized from a concentrated (1mg/ml) solution with 0.0045mM NaHCO<sub>3</sub>.

**Stability:**

Lyophilized Prolactin although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution PRL 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.

**Usage:**

NeoBiolab's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

**Solubility:**

It is recommended to reconstitute the lyophilized Prolactin in sterile 18M-cm H<sub>2</sub>O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

**Introduction:**

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.

**Biological Activity:**

Is fully biologically active as evidenced by inducing proliferation of Nb2 cells.

**References:**

1. Title: Prolactin Treatment Improves Engraftment and Function of Transplanted Pancreatic Islets. Publication: Published online before print December 18, 2008, doi: 10.1210/en.2008-1318 Endocrinology April 1, 2009 vol. 150 no. 4 1646-1653  
.Link: <http://endo.endojournals.org/content/150/4/1646.full>
2. Title: ISLET ENDOTHELIAL CELLS AND PANCREATIC -CELL PROLIFERATION: STUDIES IN VITRO AND DURING PREGNANCY

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