

Recombinant Human Prolactin (rh PRL)

Synonyms: Mammothropin, Luteotropic hormone, Luteotropin

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.

Description: Recombinant human Prolactin produced in *E.Coli* is a single, non-glycosylated polypeptide chain containing 200 amino acids and having a molecular mass of 23 kDa.

Source: *Escherichia Coli*.

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a concentrated (1mg/ml) solution with 10mM sodium Phosphate buffer pH=8 and 50mM NaCl.

Solubility: It is recommended to reconstitute the lyophilized Prolactin in sterile 18MΩ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Stability: 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.

Purity: Greater than 95.0% as determined by:

- (a) Analysis by SEC-HPLC.
- (b) Analysis by SDS-PAGE.

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 ED₅₀ as determined by the dose-dependant stimulation of the proliferation of rat lymphoma, Nb2-11 was found to be < 0.065ng/ml corresponding to a Specific Activity of 15,385,000IU/mg.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	10 µg	Cat.N°	11343583
<i>medium</i>	50 µg	Cat.N°	11343585

ImmunoTools Excellent Quality - Advantageously priced

Gladiolenweg 2; 26169 Friesoythe; Germany
 phone:+49-(0)4491-400997, fax:+49-(0)4491-400998, info@immunotools.com
www.immunotools.com