

## 32-6530: Prolactin Human, Antagonist

**Application :** Functional Assay

**Alternative Name :** Mamotropin, Luteotropic hormone, Luteotropin, PRL.

### Description

Source: Escherichia Coli.

Sterile Filtered White lyophilized (freeze-dried) powder.

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. Prolactin is secreted when eating, nursing, mating, estrogen treatment and during ovulation. Prolactin's primary role is to promote and maintain lactation but also plays a role in breast cancer development, regulation of reproductive function and immunoregulation.

Prolactin Human Recombinant Antagonist des 1-9, G129R produced in E.Coli is a single, non-glycosylated polypeptide chain containing 190 amino acids + an additional Ala at n-terminal and having a molecular mass of ~ 22 kDa. The Human Prolactin Antagonist is purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 5 µg / 25 µg

**Purification :** Greater than 95.0% as determined by gel filtration analysis.

**Content :** The protein was lyophilized from a concentrated (1mg/ml) solution with 0.02% NaHCO<sub>3</sub>. It is recommended to reconstitute the lyophilized Prolactin in sterile 0.4% NaHCO<sub>3</sub> pH-8.5, not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

**Storage condition :** 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.

**Amino Acid :** The a.a. sequence of the 1st 6 N-terminal a.a. was found to be Ala-Arg-Ser-Gln-Val-Thr.

### Application Note

Human Prolactin Antagonist was tested for its biological functionality in-vitro by inducing proliferation of Nb2 cells or Baf/3 cells that were stably transfected with Human Prolactin receptors. Prolactin Antagonist also interacts at 1:1 molar ratio with human prolactin receptor extracellular domain as documented by SEC and SPR (Biacore analysis).