

Active Recombinant Rabbit Prolactin

Cat. No. PRL-180R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant rabbit prolactin produced in <i>E.coli</i> is one polypeptide chain containing 199 amino acids and an additional Ala at N-terminus and having a molecular mass of 23 kDa. The Prolactin was purified by proprietary chromatographic techniques.
Species	Rabbit
Source	E.coli
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.
Amino Acid Sequence	The sequence of the first five N-terminal amino acids was determined and was found to be Ala-Pro-Ile-Cys-Pro.
Physical Appearance	White lyophilized (freeze-dried) powder.
Purity	Greater than 98.0% as determined by: (a) Analysis by reducing and non-reducing SDS-PAGE gel. (b) Gel-filtration chromatography under non denaturing conditions.
Formulation	The protein was lyophilized from a concentrated (1mg/ml) solution with 0.02% NaHCO ₃ .

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Solubility	It is recommended to reconstitute the lyophilized rbPRL in sterile 0.4% NaHCO ₃ adjusted, not less than 100g/ml, which can then be further diluted to other aqueous solutions.
Endotoxin	Less than 0.05 ng/g (IEU/g) of rabbit prolactin.
Protein Content	Protein quantization was carried out by UV spectroscopy at 280 nm using the absorbency value of 0.850 as the extinction coefficient for a 0.1% (1mg/ml) solution at pH 8.0. This value is calculated by the PC GENE computer analysis program of protein sequences.
Dimers And Aggregates	The purified rbPRL consists of > 98% monomers as determined by gel-filtration chromatography.
Biological Activity	rbPRL is fully biologically active as evidenced by inducing proliferation of Nb2 cells and Baf3 cells stably transfected with rabbit prolactin receptor, although its relative activity as compared to human prolactin is respectively 8-fold and 4-fold lower. Rabbit PRL forms also 1:1 complex with rabbit PRLR-ECD.
Stability	Lyophilized rbPRL although stable at room temperature for several weeks, should be stored desiccated below -18°C. Upon reconstitution at > 0.1 rbPRL mg/ml and up to 22 mg/ml and filter sterilization rbPRL can be stored at +4 °C.

GENE INFORMATION

Gene Name	PRL prolactin [<i>Oryctolagus cuniculus</i>]
Synonyms	PRL; prolactin
Gene ID	100009394

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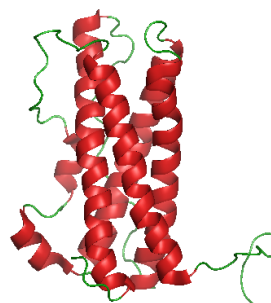
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mRNA Refseq [NM_001082675](#)

Protein Refseq [NP_001076144](#)

UniProt ID [Q28632](#)

Prolactin



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