



Recombinant Protein Technical Manual

Recombinant Human Prolactin/PRL Protein

RPES0285

Product Data:

Product SKU: RPES0285

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: P01236

Protein Information:

Molecular Mass: 23 kDa

AP Molecular Mass: 25 kDa

Tag:

Bio-activity:

Purity: > 95% as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, 1mM EDTA, pH7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Prolactin; PRL

Immunogen Information:

Sequence: Leu29-Cys227

Background:

Prolactin (PRL) is a secreted neuroendocrine pituitary hormone that acts primarily on the mammary gland to promote lactation, but has pleiotropic effects in both males and females. Non-glycosylated prolactin is produced by the pituitary and packaged in storage granules before secretion, while glycosylated prolactin is reported to be constitutively secreted, have lower biological potency, and be removed from the circulation more quickly. Prolactin is synthesized mainly by the anterior pituitary in all mammals, where secretion is under tonic inhibition by hypothalamic dopamine. In humans, prolactin is also produced peripherally. Prolactin expression is low during early human pregnancy, but increases in late pregnancy. The prolactin receptor (PRLR) is a transmembrane type I glycoprotein that belongs to the cytokine hematopoietic receptor family. prolactin molecule is thought to bind two receptor molecules. In addition to its lactogenic activity, peripherally produced prolactin plays roles in breast and prostate cancer development, regulation of reproductive function, and immunoregulation.