# **Recombinant Sheep Prolactin/PRL (C-6His)**

### Catalog No. PKSQ050097

*Note:* Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Synonyms	Prolactin;PRL
Species	Sheep
Expression Host	HEK293 Cells
Sequence	Thr31-Cys229
Accession	P01240
Calculated Molecular Weight	23.5 kDa
Observed molecular weight	25-30 kDa
Tag	C-His
Bioactivity	Not validated for activity
Properties	
Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per $\mu$ g of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°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 Tris-HCl, 150mM NaCl, pH 8.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.
Data	



> 95 % as determined by reducing SDS-PAGE.

## Background

Prolactin (PRL) is a secreted neuroendocrine pituitary hormone that acts primarily on the mammary gland to promote

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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.

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