Recombinant Human Prolactin/PRL Protein

Catalog Number: PKSH033553

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

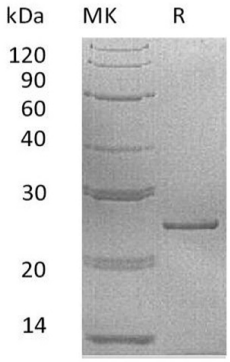
Description

Species	Human
Source	E.coli-derived Human Prolactin/PRL protein Leu29-Cys227
Calculated MW	23 kDa
Observed MW	25 kDa
Accession	P01236
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.01 EU per μg 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 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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, pH 7.4. 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



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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 secrete d; 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.