

Prl

Recombinant Rat Prolactin, Animal Free

Catalog No.	CRR309A-AF	Quantity:	10 µg
	CRR309B-AF		100 µg
	CRR309C-AF		1 mg

Alternate Names: PRL

Description: Prolactin is a hormone that is produced and secreted by the pituitary gland. Prolactin acts in an endocrine, paracrine, and autocrine manner. The prolactin receptor (PRLR) is expressed on many cell types, including cells of the reproductive organs, central nervous system, and breast cancer. Prolactin signal transduction occurs via JAK kinase signaling pathways. The primary function of prolactin is to regulate lactation, but prolactin also plays functional roles in the immune system and during cell growth, apoptosis, and differentiation.

Gene ID: 24683

UniProt ID: P01237

Source: *E. coli*
Manufactured without Animal-derived products, in an Animal Free facility.

Molecular Weight: Monomer, 22.7 kDa (198 aa)

Formulation: Lyophilized from a sterile-filtered solution containing 20 mM sodium phosphate, pH 7.5

Purity: ≥ 95% by reducing and non-reducing SDS-PAGE

Endotoxin Level: ≤ 1 EU/µg by kinetic LAL analysis

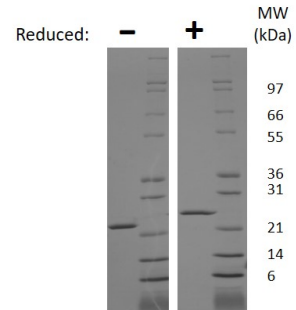
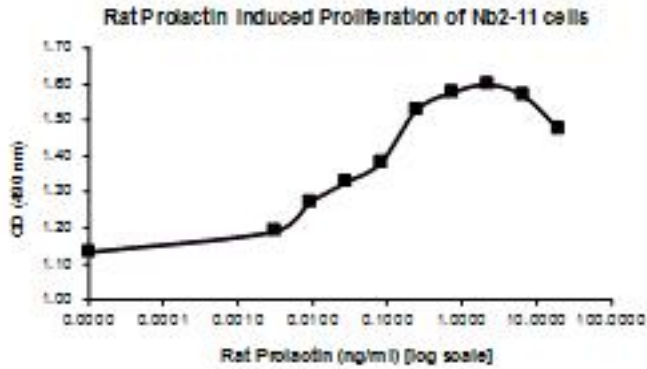
Biological Activity: Typical ED₅₀ < 0.1 ng/ml, determined by dose-dependent proliferation of Nb2-11 cells

Amino Acid Sequence: MLPVCSGGDC QTPLPELFD R VVMLSHYIHT LYTDMFIEFD KQYVQDREFI
 AKAINDCPTS SLATPEDKEQ AQKVPPEVLLNLILSLVHSW NDPLFQLITG
 LGGIHEAPDA IISRAKEIEE QNKRLLEGIE KII SQAYPEA KGNEIYLVWS QLPSLQGVD E
 ESKDLAFYNNIRCLRRDSHK VDNYLKFLRC QIVHKNNC

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water to reconstitute to a recommended concentration of 0.1 mg/mL and gently pipet solution up and down sides of vial. **DO NOT VORTEX.** Allow several minutes for reconstitution.

Storage & Stability: Store as supplied at -20°C to -80°C for up to 1 year. Upon reconstitution, prepare working aliquots and store at -20°C to -80°C. It is recommended that a carrier protein such as 0.1% HSA or BSA is added for long term storage.
Avoid repeated freeze-thaw cycles.

Figure 1: Nb2-11 cells were cultured with 0 to 20 ng/ml Rat Prolactin. Cell proliferation was measured after 66 hours and the linear portion of the curve was used to calculate the ED50.



Rat Prolactin Gel

Figure: 1 ug run under (-) non-reducing conditions and (+) reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue. Rat Prolactin is predicted to have a MW of 22.7 kDa.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

