

Product: **Recombinant Rat Prolactin**
Cat #: 300-522P
Powder

Description	Prolactin (PRL) is a hormone that is made and secreted by the pituitary gland and acts in an endocrine, paracrine and autocrine manner. The prolactin receptor is expressed on many cell types and is linked to JAK kinase signaling pathways. PRL's primary function is to regulate lactation, but it is known to have many other regulation functions. These functions include roles in the immune system, cell growth, apoptosis, and differentiation. Alternate names: none
MW	Non-glycosylated protein, containing 198 amino acids, with a molecular weight of 22.7 kDa.
Physical Appearance	Sterile filtered white lyophilized (freeze-dried) powder.
Source	<i>E. coli</i>
Formulation	Lyophilized from a sterile filtered aqueous solution containing 10 mM Na ₃ PO ₄ , pH 7.5
Reconstitution	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/mL, which can be further diluted into other aqueous solutions.
Stability	Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.
Biological Activity	The activity is determined by the ability to stimulate proliferation of NB2-11 cells and is typically less than 1 ng/mL. This corresponds to an expected specific activity of 1 x 10 ⁶ units/mg.
Endotoxin Level	Measured by kinetic LAL analysis and is typically < 0.05 EU/μg protein.
AA Sequence	MLPVCSSGGDC QTPLPELFDR VVMLSHYIHT LYTDMFIEFD KQYVQDREFI AKAINDCPTS SLATPEDKEQ AQKVPPEVLL NLILSLVHSW NDPLFQLITG LGGIHEAPDA IISRAKEIEE QNKRLLEGIE KIISQAYPEA KGNEIYLVWS QLPSLQGVDE ESKDLAFYNN IRCLRRDSHK VDNLYLKFLRC QIVHKNNC
	Purity greater than 97% determined by Reducing and Non-reducing SDS-PAGE.
	Protein content determined by Reducing and Non-reducing SDS-PAGE.

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!