

Prolactin Protein, Mouse, Recombinant (His)

General Information

Synonyms:	AV290867;Prl1a1;prolactin
Protein Construction:	A DNA sequence encoding the mouse PRL (NP_035294.2) (Leu 32-Cys 228) was expressed, with an initial Met at the N-terminus and a polyhistidine tag at the C-terminus. Predicted N terminal: Met
Species:	Mouse
Expression Host:	Baculovirus Insect Cells
Accession:	Q9CPQ2
Molecular Weight:	23.8 kDa (predicted); 26 kDa (reducing conditions)

QC Testing

Biological Activity:	Measured by its ability to promote proliferation of INS-1 cells. The ED50 for this effect is typically 50-500 ng/mL.
Purity:	≥ 92 % as determined by SDS-PAGE. ≥ 90 % as determined by SEC-HPLC.
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing 20 mM Tris, 500 mM NaCl, pH 7.4, 10% glycerol. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:
Reconstituted with sterile deionized water to 0.25 mg/mL. Reconstitution conditions may vary depending on the lot.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Prolactin (PRL) is a hormone with multiple actions in the central nervous system (CNS) spanning from physiology to pathology. PRL exerts different actions through its receptors that can be found in both neurons and glial cells (astrocytes, microglia and oligodendrocytes) of the brain. It is generally believed that in vertebrates, prolactin (PRL) is predominantly synthesized and released by pituitary lactotrophs and plays important roles in many

physiological processes via activation of PRL receptor (PRLR), including water and electrolyte balance, reproduction, growth and development, metabolism, immuno-modulation, and behavior.

Reference

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