# Mouse PRL / Prolactin Protein (His Tag)

Catalog Number: 50367-M08B



#### **General Information**

#### Gene Name Synonym:

AV290867: Prl1a1

#### **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.

Source: Mouse

**Expression Host:** Baculovirus-Insect Cells

**QC** Testing

**Purity:** > 92 % as determined by SDS-PAGE.

#### **Bio Activity:**

Measured by its ability to promote proliferation of INS-1 cells. The  $ED_{50}$ ?for this effect is typically 50-500 ng/mL.

#### **Endotoxin:**

< 1.0 EU per µg of the protein as determined by the LAL method

#### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Met

### **Molecular Mass:**

The recombinant mouse PRL consists of 207 amino acids and has a calculated molecular mass of 23.8 kDa. It migrates as an approximately 26 kDa band in SDS-PAGE under reducing conditions.

#### Formulation:

Lyophilized from sterile 20mM Tris, 500mM NaCl, pH 7.4, 10% glycerol

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

#### **Usage Guide**

#### Storage:

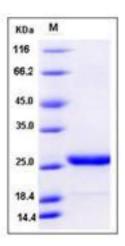
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

#### Avoid repeated freeze-thaw cycles.

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

#### SDS-PAGE:



## **Protein Description**

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.

#### References

1.Jara LJ, et al. (2011) Prolactin and autoimmunity. Clin Rev Allergy Immunol. 40(1): 50-9. 2.Urban A, et al. (2007) Prolactin as a factor for increased platelet aggregation. Neuro Endocrinol Lett. 28(4): 518-23. 3.Charoenphandhu N, et al. (2007) Prolactin is an important regulator of intestinal calcium transport. Can J Physiol Pharmacol. 85(6): 569-81.

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