Recombinant Mouse Prolactin (PRL)

Cat No:HR2R2213

For research use only

Overview

Quantity	10 ?g
Gene Symbol	PRL
Gene ID	19109
Accession	P06879
Alternative Name	PRL
Species	Mouse
Source	Insect cells
Description	Prolactin is a neuroendocrine pituitary hormone of 23 kDa. It is produced in increasing amounts during pregnancy and during suckling and acts primarily on the mammary gland by initiating and maintaining lactation in the postpartal phase. Prolactin has been shown also to have cytokine-like activities and to have important immunoregulatory activities. It contributes to the development of lymphoid tissues and the maintenance of physiological immune function and also modulates a variety of T cell immune responses. In addition to triggering resting lymphocytes to cell division, the hormone can also control the magnitude of their response to polyclonal stimuli. Prolactin promotes the proliferation of Nb2 pre-T cell lymphoma cells. In these cells prolactin induces the biphasic expression of a transcription factor, IRF1 and may be involved in cell cycle activation and S phase progression. Prolactin has been reported to activate cellular proliferation in non-reproductive tissue, such as liver, spleen, and thymus. It induces significant proliferation in aortic smooth muscle cells and also enhances proliferation of these cells induced by PDGF.
Functions	The activity was determined by the dose-dependent proliferation of Nb2 cells.
Formulation	Recombinant mouse Prolactin is presented as concentrated 1mg/ml, 0.2 ?m filtered 20 mM Tris solution, 0.5 M NaCl pH 7.4, containing 5% trehalose 10% glycerol.
Solubility	A quick spin of the vial followed by reconstitution in distilled water to a concentration of 0.1 mg/mL.
Appearance	Lyophilized Powder
Molecular Weight	23
Purity	>95% as determined by SDS-PAGE
Concentration	<1.0 EU/?g of recombinant protein as determined by the LAL method.
Shipping Condition	Ambient Temperature

Storage Condition	Upon reconstitution, this cytokine can be stored in working aliquots at 2? - 8?C for one month, or at -20?C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.

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