Recombinant Human Prolactin Receptor (PRL-R)

CATALOG #: 4989-20 20 μg 4989-1000 1 mg

LOT #: _____

SYNONYMS: PRL-R, hPRLrl

SOURCE: E. coli

PURITY: >97% by SDS-PAGE and HPLC analyses

Endotoxin level is <0.1 ng/µg of human PRL-R

MOLECULAR WT: 23.97 kDa

FORM: Lyophilized from a concentrated (0.4 mg/ml) solution with

0.0045 mM NaHCO₃

RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitute in sterile dH2O to a concentration of 0.1 -1 mg/ml and let the lyophilized pellet dissolve completely. This solution can then be diluted into other aqueous buffers and stored at 4°C for 1 week or -20°C for future use.

STORAGE CONDITIONS:

The lyophilized human PRL-R is best-stored desiccated below 0°C. Reconstituted PRL-R should be stored in working aliquots at -20°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles as they cause oligomerization of the protein.

DESCRIPTION:

Prolactin is a pituitary hormone that plays a role in the stimulation of milk production, salt and water regulation, growth, development and reproduction. The primary step in its action is the binding to a specific membrane receptor (prolactin receptor) which belongs to the superfamily of class 1 cytokine receptors. Prolactin is a hormone involved in a range of significant functions including ion transport and osmoregulation, stimulation of milk, protein synthesis as well as the regulation of numerous reproductive functions. Prolactin exerts its influence on different cell types through a signal transduction pathway which begins with the binding of the hormone to a transmembrane Prolactin receptor. PRLR varies in size (short and long forms) with tissue source and species, from ~40 kDa to 100 kDa. Recombinant human Prolactin Receptor (Extra Cellular Domain) produced in E.Coli is a non-glycosylated, Polypeptide chain containing 210 amino acids and having a molecular mass of 23.97 kDa.

BIOLOGICAL ACTIVITY:

Determined by the dose-dependent inhibition of Prolactin stimulated proliferation of Nb2 cells and by high affinity binding of ovine Prolactin and other lactogenic hormones in 1:1 molar ratio.

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- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
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