

Mouse ProlactinR(PRLR) Protein; His Tag

Product Information

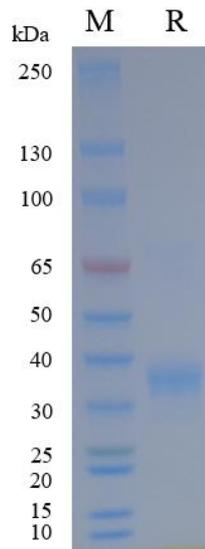
Product Name	Mouse ProlactinR(PRLR) Protein; His Tag
Storage temp	Store at $\leq -70^{\circ}\text{C}$, stable for 6 months after receipt. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.
Catalog# / Size	GM-88151RP-100 / 100 μg GM-88151RP-1000 / 1 mg

Protein Information

Alternative Names	Prolactin R, PRLR, PRL-R
Source	Mouse ProlactinR(PRLR) Protein; His Tag (GM-88151RP) is expressed from human 293 cells (HEK-293). It contains AA Gln 20 - Asp 229 (Accession # Q08501-1). This protein carries a His tag at the C-terminus.
Purity	> 95% as determined by SDS-PAGE
Endotoxin	< 1 EU/ μg , determined by LAL gel clotting assay
Predicted Mol Mass	25.4 KDa
Formulation	Supplied as a 0.2 μm filtered solution of PBS, pH7.2-7.4.
Description	<p>Prolactin receptor (PRLR) is a transmembrane glycoprotein in the cytokine receptor family with multiple isoforms from alternative splicing (full-length and truncated forms). Upon prolactin binding, PRLR dimerizes and activates JAK2, triggering downstream signaling in tissues like mammary gland, ovary, and immune cells. Signaling is regulated by receptor internalization and negative regulators (e.g., SOCS proteins) with cross-talk to other pathways.</p> <p>PRLR mainly signals via the JAK2/STAT5 axis: prolactin activates JAK2, leading to STAT5 phosphorylation, dimerization, and nuclear translocation to drive milk protein and lactation-related gene expression, plus cell survival/differentiation genes. PRLR also activates MAPK/ERK and PI3K/AKT pathways, influencing proliferation, migration, and metabolism. Negative feedback involves SOCS proteins (notably SOCS3); receptor internalization (clathrin- or caveolin-mediated) modulates signal duration. Cross-talk with other hormones/cytokines tunes PRLR responses during pregnancy, lactation, and immune regulation.</p>

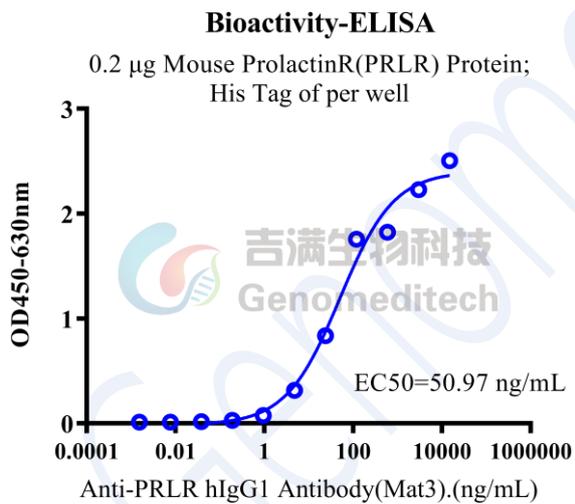
Version:4.0

SDS-PAGE



On SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Mouse ProlactinR(PRLR) Protein; His Tag (Catalog # GM-88151RP) was immobilized at 2 μ g/ml (100 μ L/well).

Increasing concentrations of Anti-PRLR hIgG1 Antibody(Mat3) (Catalog # GM-27198AB) were added.