Active Recombinant Human PRLR Homodimer Protein, His&Avi tagged

Cat. No. PRLR-54H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	PRLR dimer protein contains a PRLR extracellular domain (UniProt# P16471) fused with a proprietary dimer motif followed by a tandem His-Avi tag at the C-terminus was expressed in HEK293T.
Species	Human
Source	HEK293T
ProteinLength	25-234 aa
Description	Human prolactin receptor (PRLR), also known as PRL-R, is a class 1 cytokine receptor glycoprotein that binds prolactin (PRL) as well as growth hormone (GH) and human placental lactogen (hPL). PRLR contains an extracellular domain with a cytokine homology module formed by two fibronectin type III domains, D1 and D2, followed by a transmembrane domain and cytoplasmic domain. PRLR is expressed on cells in mammary glands, pituitary gland, and other tissues. PRLR exists as a monomer and can form dimers. PRLR dimerization is a critical mechanism in PRL signaling, influencing numerous physiological and pathological processes. PRLR pathological dimerization, including constitutive or ligand-independent PRLR dimers sustain abnormal signaling, contributes to cancer, hyperprolactinemia, and immune dysfunction. Dysregulation of PRLR can promote tumor activity and positively regulate the proliferation of malignant cells in breast cancer. PRLR is an attractive therapeutic target for PRLR related diseases including breast cancer,

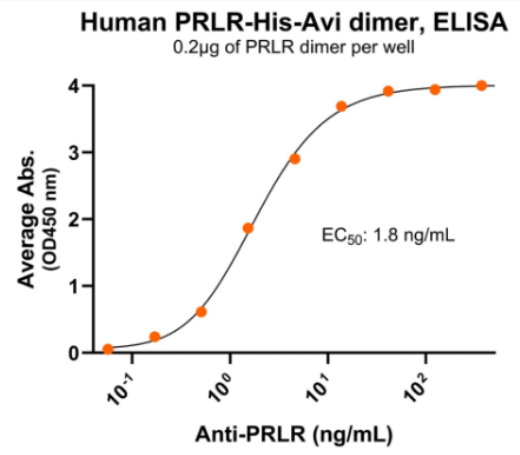
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	hyperprolactinemia, and metabolic disorders. The recombinant dimeric protein mimicking the PRLR structural dynamics may offer better immunogen and antigen to develop precision-targeted therapeutics with fewer side effects.
Molecular Mass	69 kDa
Purity	Greater than 90% dimer form as determined by SDS-PAGE under non-reducing condition
Application	Verified Applications: ELISA for PRLR-specific antibody and prolactin (PRL) ligand protein binding assays. Suggested Applications: ELISA for PRLR-specific antibody and prolactin (PRL) ligand protein binding assays. SPR & BLI for PRLR-specific antibody and PRL protein binding assays. Animal immunization, RUO.
Storage	Store at -80 centigrade.
Storage Buffer	0.22μm filtered PBS, pH 7.4
Shipping	Frozen Dry Ice

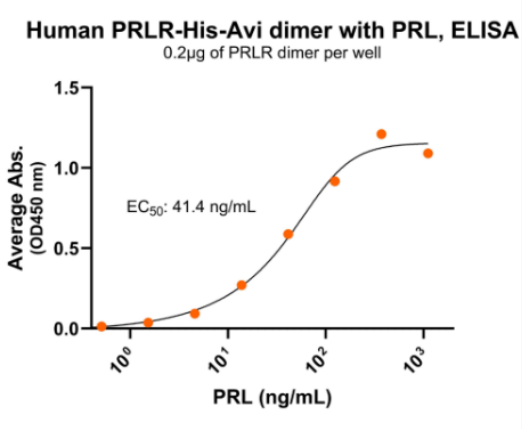
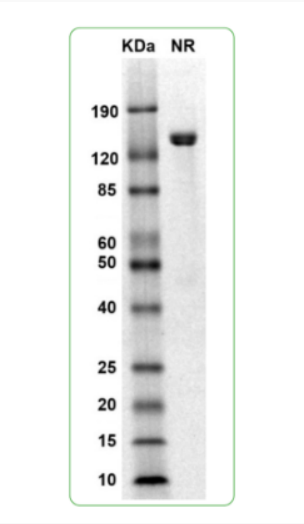
GENE INFORMATION

Gene Name	PRLR prolactin receptor [Homo sapiens (human)]
Official Symbol	PRLR
Synonyms	PRLR; prolactin receptor; PRL-R; hPRL receptor; secreted prolactin binding protein; hPRLrI;
Gene ID	5618

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mRNA Refseq	NM_000949
Protein Refseq	NP_000940
MIM	176761
UniProt ID	P16471
Bioactivity-Antibody Binding	 Immobilized human PRLR dimer protein, His-Avi tag at 2 μg/mL (100 μL/well) can bind anti-human PRLR monoclonal antibody, with half maximal effective concentration (EC50) range of 0.9-3.7 μg/mL (QC tested).

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Bioactivity-Ligand Binding	 Immobilized human PRLR dimer protein, His-Avi tag at 2 μg/mL (100 μL/well) can bind human PRL, with half maximal effective concentration (EC50) range of 20.7-82.8 ng/mL (QC tested).
SDS-PAGE and WB	 MW: Molecular Weight marker reduced condition NR: PRLR dimer under non-reduced condition

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