

Recombinant Mouse PRLR/Prolactin Receptor Protein (His Tag)

Catalog No. PKSM041218

Note: Centrifuge before opening to ensure complete recovery of vial contents.

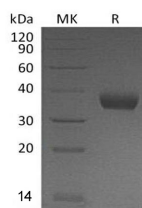
Description

Synonyms	Prolactin receptor;PRL-R;Prlr;Prolactin R;PRLR;Pr-1;Pr-3;Prlr;Prlr-rs1
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Gln20-Asp229
Accession	Q08501
Calculated Molecular Weight	25.6 kDa
Observed molecular weight	33-40 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

The prolactin receptor (PRLR) is a member of the class I cytokine/lactogen receptor family which mediates the diverse cellular actions of prolactin in several tissues. PRLRs are expressed in normal and neoplastic human breast tissue, and in

For Research Use Only

most breast cancer cells. PRLR contains an extracellular region that binds prolactin, a transmembrane region, and a cytoplasmic region required for the activation of the Jak2–Stat5 signal transduction pathway by Prl which is essential for transcriptional activation of all known prolactin regulated genes. PRLRs have also been observed in ovarian follicular cells of mice, pigs, sheep, deer, and humans, as well as in luteal tissue in cow and horse ovaries. Furthermore, PRLR knockout mice exhibit failure of embryonic implantation, reduced number of mature oocytes, and low fertilization rates. Knockout females also display a reduced number of primary follicles.