



Recombinant Protein Technical Manual

Recombinant Mouse PRLR/Prolactin Receptor Protein (Fc Tag) RPES0795

Product Data:

Product SKU: RPES0795

Size: 10µg

Species: Mouse

Expression host: Human Cells

Uniprot: Q08501

Protein Information:

Molecular Mass: 51.7 kDa

AP Molecular Mass: 62-88 kDa

Tag: C-Fc

Bio-activity:

Purity: > 95% as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°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, pH7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Prolactin receptor; PRL-R; Prlr; Prolactin R; PRLR

Immunogen Information:

Sequence: Gln20-Asp229

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 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.