

Recombinant Protein Technical Manual Recombinant Mouse IL-21R Protein (His Tag)

RPES1321

Product Data:

Product SKU: RPES1321 **Size:** 10μg

Species: Mouse Expression host: Human Cells

Uniprot: Q9JHX3

Protein Information:

Molecular Mass: 25.7 kDa

AP Molecular Mass: 34-38 kDa

Tag: C-His

Bio-activity:

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

Endotoxin: $< 1.0 \text{ EU per } \mu\text{g}$ 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: Interleukin-21 receptor; IL-21 receptor; IL-21R; Il21r; Nilr

Immunogen Information:

Sequence: Cys20-Pro236

Background:

Interleukin-21 receptor (IL-21R) is a type I transmembrane glycoprotein within the class I cytokine receptor family, type 4 subfamily. IL-21R is expressed mainly on B cells, NK cells, and activated T cells, but is also found on dendritic cells, alternatively activated macrophages, intestinal lamina propria fibroblasts and epithelial cells, and keratinocytes. Both IL-21 and IL-4 are necessary for efficient B cell IgG1 production and normal germinal center architecture. B cell IL-21 R engagement induces Blimp(which mediates plasma cell differentiation), and is important for memory responses. IL-21R engagement on mouse NK cells enhances their cytotoxic activity and IFN-y production. IL-21R engagement on CD8+T cells aids control of viral infection and tumor growth? IL-21R is also necessary for sufficient numbers of regulatory T cells to combat chronic inflammation. IL-21R expression is often up-regulated in allergic skin inflammation, systemic lupus erythematosus and diffuse large B cell lymphoma (DLBCL).