

## Recombinant Mouse IL-21R Protein (His Tag)

**Catalog No.** PKSM041316

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

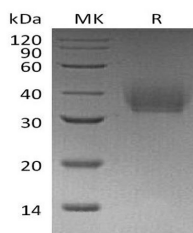
### Description

<b>Synonyms</b>	Interleukin-21 receptor;IL-21 receptor;IL-21R;IL21r;Nilr
<b>Species</b>	Mouse
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Cys20-Pro236
<b>Accession</b>	Q9JHX3
<b>Calculated Molecular Weight</b>	25.7 kDa
<b>Observed molecular weight</b>	34-38 kDa
<b>Tag</b>	C-His
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	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.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### 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,

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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-1(which mediates plasma cell differentiation), and is important for memory responses. IL-21R engagement on mouse NK cells enhances their cytotoxic activity and IFN- $\gamma$  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).