

## Recombinant Human IL-11 protein(His Tag)

**Catalog Number:** PKSH034102

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

### Description

<b>Species</b>	Human
<b>Source</b>	E.coli-derived Human IL-11 protein Pro 22-Leu 199, with an N-terminal His
<b>Calculated MW</b>	20.0 kDa
<b>Observed MW</b>	24 kDa
<b>Accession</b>	P20809
<b>Bio-activity</b>	Measure by its ability to induce T11 cells proliferation. The ED <sub>50</sub> for this effect is <0.2 ng/mL. The specific activity of recombinant human IL-11 is approximately >1 x 10 <sup>7</sup> IU/mg.

### Properties

<b>Purity</b>	> 98 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 0.1 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 sterile PBS,pH 8.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 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.

### Background

Interleukin 11 (IL-11) is a member of a family of human growth factors that includes human growth hormone, granulocyte colony-stimulating factor, and other growth factors. IL-11 is a thrombopoietic growth factor that directly stimulates the proliferation of hematopoietic stem cells and megakaryocyte progenitor cells and induces megakaryocyte maturation resulting in increased platelet production. It also promotes the proliferation of hepatocytes in response to liver damage. Binding to its receptor formed by IL6ST and either IL11RA1 or IL11RA2, It activates a signaling cascade that promotes cell proliferation. The signaling leads to the activation of intracellular protein kinases and the phosphorylation of STAT3.

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