

## Recombinant Human IL-5 protein(His Tag)

Catalog Number: PKSH034100

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

### Description

<b>Species</b>	Human
<b>Source</b>	E.coli-derived Human IL-5 protein Ile 20-Ser 134, with an C-terminal His
<b>Calculated MW</b>	14.1 kDa
<b>Observed MW</b>	14 kDa
<b>Accession</b>	P05113
<b>Bio-activity</b>	Measure by its ability to induce TF-1 cells proliferation. The ED <sub>50</sub> for this effect is <0.3 ng/mL.

### 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

IL-5 is expressed in eosinophils, NK cells, TC2 CD8+ T cells, mast cells, CD45+ CD4+ T cells, gamma delta T cells and IL-1 beta activated endothelial cells. IL-5 acts as a growth and differentiation factor for both B cells and eosinophils. Relative to B cells, IL-5 appears to induce the differentiation of activated conventional B-2 cells into Ig-secreting cells. In addition, it induces the growth of B-1 progenitors as well as IgM production by B-1 cells. IL-5 appears to perform a number of functions on eosinophils. These include the down modulation of Mac-1, the upregulation of receptors for IgA and IgG, the stimulation of lipid mediator (leukotriene C4 and PAF) secretion and the induction of granule release. IL-5 also promotes the growth and differentiation of eosinophils.

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