

## Recombinant Human IL-9 protein(His Tag)

**Catalog Number:** PKSH034101

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

### Description

<b>Species</b>	Human
<b>Source</b>	E.coli-derived Human IL-9 protein Gln 19-Ile 144, with an N-terminal His
<b>Calculated MW</b>	14.9 kDa
<b>Observed MW</b>	19 kDa
<b>Accession</b>	P15248
<b>Bio-activity</b>	Measure by its ability to induce proliferation in MO7e cells. The ED <sub>50</sub> for this effect is <0.25 ng/mL. The specific activity of recombinant human IL-9 is approximately >5 x10 <sup>6</sup> IU/ mg.

### Properties

<b>Purity</b>	> 98 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 0.01 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-9 (IL-9) is a secreted protein that belongs to the IL-7/IL-9 family. Mature mouse IL-9 shares 57% and 74% amino acid sequence identity with human and rat IL-9, respectively. IL-9 supports IL-2 independent and IL-4 independent growth of helper T-cells. IL-9 stimulates cell proliferation and prevents apoptosis. It functions through the IL-9 receptor (IL-9R), which activates different signal transducer and activator (STAT) proteins and thus connects this cytokine to various biological processes. IL-9 has been identified as a candidate gene for asthma. IL-9 is a determining factor in the pathogenesis of bronchial hyperresponsiveness.

### For Research Use Only