

## Recombinant Human IL-25 protein(His Tag)

**Catalog Number:** PKSH034110

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

### Description

<b>Species</b>	Human
<b>Source</b>	E.coli-derived Human IL-25 protein Tyr 33-Gly 177, with an C-terminal His
<b>Calculated MW</b>	17.7 kDa
<b>Observed MW</b>	19 kDa
<b>Accession</b>	Q9H293
<b>Bio-activity</b>	<ol style="list-style-type: none"> <li>1. Measure by its ability to induce IL-8 secretion in human PBMCs. The ED<sub>50</sub> for this effect is &lt;5 ng/mL.</li> <li>2. Measure by its ability to induce CXCL1 secretion in HT29 cells. The ED<sub>50</sub> for this effect is &lt;1 ng/mL.</li> </ol>

### 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>	<p>Lyophilized from sterile PBS,pH 8.0.</p> <p>Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.</p> <p>Please refer to the specific buffer information in the printed manual.</p>
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Background

Interleukin-25 (IL-25) is a cytokine that shares sequence similarity with interleukin 17. This cytokine can induce NF-κB activation, and stimulate the production of interleukin 8. Both this cytokine and interleukin 17B are ligands for the cytokine receptor IL17BR. IL-25 is a member of the IL-17 family of cytokines. However, unlike the other members of this family, IL-25 promotes T helper (Th) 2 responses. IL-25 also regulates the development of autoimmune inflammation mediated by IL-17-producing T cells. IL-25 and IL-17, being members of the same cytokine family, play opposing roles in the pathogenesis of organ-specific autoimmunity. IL-25 promotes cell expansion and Th2 cytokine production when Th2 central memory cells are stimulated with thymic stromal lymphopoietin (TSLP) and activated dendritic cells (DCs), homeostatic cytokines, or T cell receptor for antigen triggering. Elevated expression of IL-25 and IL-25R transcripts was observed in asthmatic lung tissues and atopic dermatitis skin lesions, linking their possible roles with exacerbated allergic disorders. A plausible explanation that IL-25 produced by innate effector eosinophils and basophils may augment the allergic inflammation by enhancing the maintenance and functions of adaptive Th2 memory cells had been provided.

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