

# Mouse IL25 Protein (His Tag)

Catalog Number: 50138-M07H



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

IL-17e; IL17e

### Protein Construction:

A DNA sequence encoding the mature form of mouse IL25 (NP\_542767.1) (Val 17-Ala 169) was expressed with a N-terminal polyhistidine tag.

**Source:** Mouse

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 80 % as determined by SDS-PAGE

### Bio Activity:

**1. Immobilized IL17RB Protein, Mouse, Recombinant (hFc Tag)(Cat:51109-M02H) at 2 µg/mL (100 µL/well) can bind IL25/IL17E Protein, Mouse, Recombinant (His Tag)(Cat:50138-M07H), the EC<sub>50</sub> is 4-20 ng/mL.**

**2. Measured by its ability to induce CXCL1/GROα secretion in HT29. The ED<sub>50</sub> for this effect is 4-14ng/mL.**

### Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** Gly

### Molecular Mass:

The secreted recombinant mouse IL25 consists of 175 amino acids and has a calculated molecular mass of 20 kDa. As a result of glycosylation, rIL25 migrates with the MW of approximately 30-35 kDa in SDS-PAGE under reducing conditions.

### Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Storage:

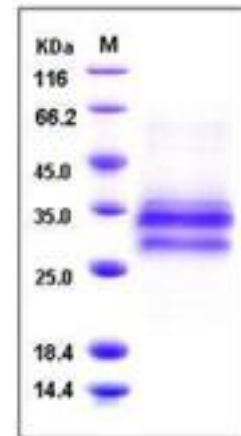
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

Interleukin-25 (IL-25) is a cytokine that shares sequence similarity with interleukin 17. This cytokine can induce NF-kappaB 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)-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.

## References

1. Rickel EA, *et al.* (2008) Identification of functional roles for both IL-17RB and IL-17RA in mediating IL-25-induced activities. *J Immunol.* 181(6): 4299-310.
2. Tamachi T, *et al.* (2006) IL-25 enhances allergic airway inflammation by amplifying a TH2 cell-dependent pathway in mice. *J Allergy Clin Immunol.* 118(3): 606-14.
3. Kleinschek MA, *et al.* (2007) IL-25 regulates Th17 function in autoimmune inflammation. *J Exp Med.* 204(1): 161-70.

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