

RP01755

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Recombinant human IL-25/IL-17E Protein

Catalog No.: RP01755

Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	64806	Q9H293

Tags

C-6His

Synonyms

IL17E;IL-25

Product Information

Source	Purification
HEK293 cells	

Endotoxin

< 0.1EU/μg

Formulation

Lyophilized from a 0.22 μm filtered solution of 20 mM Tris, 150 mM NaCl, 1 mM EDTA, pH 8.0

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize freeze-thaw cycles.

Contact



www.abclonal.com

Background

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.

Basic Information

Description

Recombinant human IL-25/IL-17E Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Tyr33-Gly177) of human IL-25 (Accession #NP_073626.1) fused with a 6×His tag at the C-terminus.

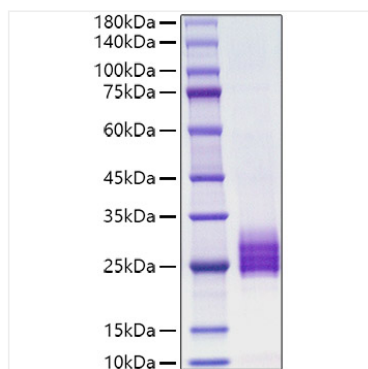
Bio-Activity

Measured by its ability to induce CXCL1/GRO alpha secretion in HT-29 human colon adenocarcinoma cells. The ED₅₀ for this effect is 13.32-53.24 ng/mL, corresponding to a specific activity of 1.88×10⁴ ~ 7.51×10⁴ units/mg.

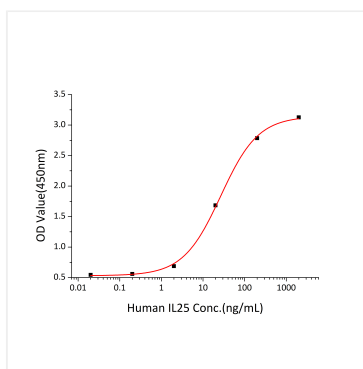
Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

Validation Data



Recombinant human IL-25 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 20-28 kDa.



Recombinant human IL-25 induce CXCL1/GRO alpha secretion in HT-29 human colon adenocarcinoma cells. The ED_{50} for this effect is 13.32-53.24 ng/mL, corresponding to a specific activity of $1.88 \times 10^4 \sim 7.51 \times 10^4$ units/mg.