



Recombinant Protein Technical Manual

Recombinant Rat Interleukin-25/IL-25 Protein (Fc Tag)(Active)
RPES4990

Product Data:

Product SKU: RPES4990

Size: 20µg

Species: Rat

Expression host: HEK293 Cells

Uniprot: D3ZLB1

Protein Information:

Molecular Mass: 46.1 kDa

AP Molecular Mass: 49 kDa

Tag: N-Fc

Bio-activity: Measured by its binding ability in a functional ELISA. Immobilized mouse IL17BR-His at 10 µg/mL (100 µl/well) can bind rat Fc-IL25. The EC50 of rat Fc-IL25 is 0.12-0.27 µg/mL.

Purity: > 85 % as determined by SDS-PAGE

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

Storage: 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.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

Synonyms: IL25

Immunogen Information:

Sequence: Val17-Ala169

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 IL7 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 IL7-producing T cells. IL-25 and IL7, 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.