Epoto Biotech

南京艾璞拓生物科技有限公司

Recombinant Mouse IL25/IL17E, Tag Free

Catalog Number: MF-1025

General Information

Synonyms	IL17E; IL-17E; IL25; IL-25; interleukin 25; Interleukin-17E; interleukin-25
Accession #	Q8VHH8
Source	Human embryonic kidney cell, HEK293-derived mouse IL25/IL17E protein
	Val17-Ala169
Predicted Moleucular weight	17.5 kDa

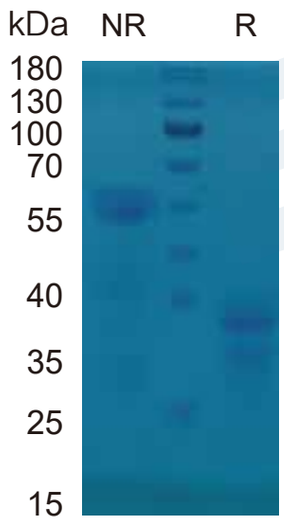
Components and Storage

Formulation	Solution protein.
	Dissolved in sterile PBS buffer.
	This solution can be diluted into other aqueous buffers. Centrifuge the vial prior to opening.
Storage and Stability	Avoid repeated freeze-thaw cycles.
	It is recommended that the protein be aliquoted for optimal storage.
	12 months from date of receipt, -20 to -70 ° C as supplied.
Shipping	Shipping with dry ice

Quality

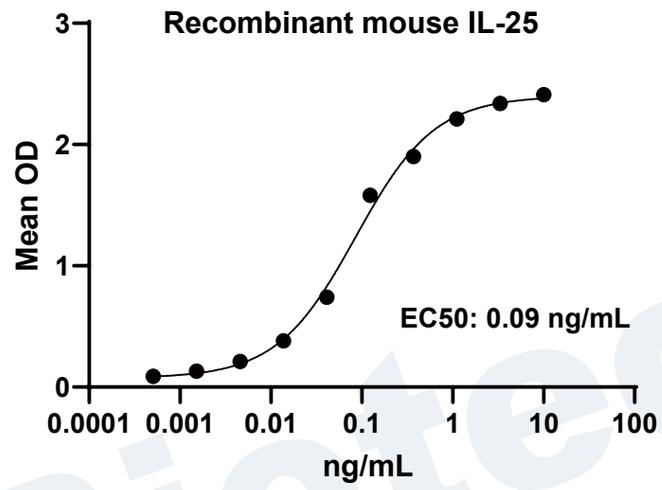
Purity	> 95%, determined by SDS-PAGE
Endotoxin Level	< 0.010 EU per 1 ug of the protein by the LAL method
Activity	Measured by its ability to induce CXCL1/GRO alpha secretion in HT-29 human colon adenocarcinoma cells.
	The EC50 for this effect is 0.02-1.0 ng/mL

SDS-PAGE



4 ug/lane protein was resolved with SDS-PAGE under non-reducing (NR) and reducing (R) conditions and visualized by Coomassie Blue staining.

Bioactivity



Measured by its ability to induce CXCL1/GRO alpha secretion in HT-29 human colon adenocarcinoma cells.

Background

IL-25, which is also known as IL-17E, promotes Th2-biased immune responses. This is in contrast to other IL-17 family members which promote Th1- and Th17-biased inflammation. IL-25 is an important mediator of allergic reactions and protection against intestinal parasites (1, 2). Mature mouse IL-25 shares 80% and 91% amino acid sequence identity with human and rat IL-25, respectively (3, 4). During helminth infections and allergic reactions IL-25 is locally up-regulated in intestinal and airway epithelial cells, atopic dermatitis skin lesions, and local Th2 cells, eosinophils, and basophils (4-9). It binds to IL-17RB but also requires IL-17 RA to exert its activity (3, 8, 10). IL-25 acts on a variety of cell types which respond with increased production of Th2 cytokines (e.g. IL-4, IL-5, IL-13) and reduced production of Th1 and Th17 cytokines (e.g. IFN- gamma, IL-12, IL-23, IL-17A, IL-17F) (4-6, 8, 9). Airway IL-25 can be activated by MMP-7, a protease that is up-regulated in airway epithelium in response to allergen exposure . Cleaved IL-25 shows enhanced binding to IL-17 RB and stronger induction of Th2 cytokines . The Th2 cytokines, in turn, trigger expansion of Th2 memory cells and anti-inflammatory M2 macrophages, increased eosinophil mobilization and activation, and dendritic cell migration (4, 6, 9). These actions promote protective anti-helminth immune responses (4, 5) as well as allergic inflammation and airway hyperreactivity(11) . The IL-25 induced suppression of Th1 and Th17 cytokines limits Th17 cell expansion and disease pathology in autoimmunity and colitis (12,).

Reference

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