

Rat Interleukin 25 / IL25 / IL17E Protein (Fc Tag)

Catalog Number: 80194-R01H



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

IL25

Protein Construction:

A DNA sequence encoding the rat IL25 (D3ZLB1) (Val17-Ala169) was expressed, fused with Fc region of human IgG1 at the N-terminus.

Source: Rat

Expression Host: Human Cells

QC Testing

Purity: > 85 % as determined by SDS-PAGE

Bio-Activity

Measured by its binding ability in a functional ELISA.

Immobilized mouse IL17BR-His (Cat:51109-M08H) at 10 µg/mL (100 µl/well) can bind rat Fc-IL25 (Cat:80194-R01H). The EC₅₀ of rat Fc-IL25 is 0.12-0.27 µg/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: Glu

Molecular Mass:

The recombinant rat IL25 comprises 413 amino acids and predicts a molecular mass of 46.1 kDa. The apparent molecular mass of the recombinant protein is approximately 49 kDa in SDS-PAGE under reducing conditions due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

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

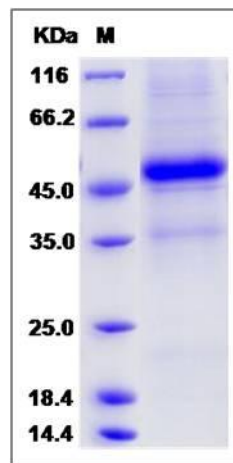
Usage Guide

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.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

Interleukin 25 (IL-25), also known as IL17E, is a cytokine that belongs to the IL17 cytokine family and is secreted by type 2 helper T cells (Th2) and mast cells. IL-25 induces the production of other cytokines, including IL-4, IL-5, and IL-13 in multiple tissues, then induces Th2 immune responses such as blood eosinophilia and increased serum immunoglobulin E levels. This cytokine is an important molecule controlling immunity of the gut and has been implicated in chronic inflammation associated with the gastrointestinal tract. Further, the IL-25 gene has been identified in a chromosomal region associated with autoimmune diseases of the gut such as inflammatory bowel disease (IBD). In addition, studies shown that enforced expression of IL-25 in the lung significantly enhances antigen-induced Th2 cytokine production and eosinophil recruitment into the airways, thus suggesting an important role of IL-25 in enhancing allergic airway inflammation by a CD4+ T-cell-dependent mechanism.

References

1. Kei I. et al., 2003, Blood. 101: 3594-6.
2. Buning. et al., 2003, European Journal of Immunogenetics.30: 329-33.
3. Owyang. et al., 2006, Journal of Experimental Medicine. 203: 843-9.
4. Tamachi T. et al., 2006, Int Arch Allergy Immunol. 151: 59-62.
5. Angkasekwinai P. et al., 2007, J Exp Med. 204: 1509-17.

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