

# Mouse IL17 / IL17A Protein

Catalog Number: 51065-MNAE



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

Ctla-8; Ctla8; IL-17; IL-17A; IL17

### Protein Construction:

A DNA sequence encoding the mature form of mouse IL17a (Q62386) (Thr22-Ala158) was expressed with a N-terminal Met.

**Source:** Mouse

**Expression Host:** E. coli

## QC Testing

**Purity:** ≥ 95 % as determined by SDS-PAGE

### Bio Activity:

1. Measured by its binding ability in a functional ELISA. Immobilized mouse IL17A (Cat: 51065-MNAE) at 2 µg/mL (100 µl/well) can bind mouse IL17RA-His (Cat: 50328-M08H). The EC<sub>50</sub> of mouse IL17RA-His (Cat:50328-M08H) is 12-45 ng/mL.

2. Measured by its ability to induce IL-6 secretion by NIH- 3T3 mouse embryonic fibroblast cells in the presence of 20 ng/mL TNFα. The ED<sub>50</sub> for this effect is 0.15-0.6 ng/mL.

### Endotoxin:

Please contact us for more information.

**Predicted N terminal:** Met

### Molecular Mass:

The recombinant mouse IL17a consists of 138 amino acids and predicts a molecular mass of 15.5 KDa. It migrates as an approximately 16 KDa band 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

### Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

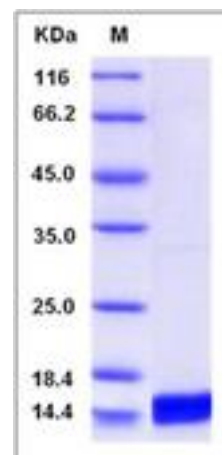
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

IL17, also known as IL17a, is a cytokine that belongs to the IL-17 family. Cytokines are proteinaceous signaling compounds that are major mediators of the immune response. They control many different cellular functions including proliferation, differentiation, and cell survival/apoptosis but are also involved in several pathophysiological processes including viral infections and autoimmune diseases. Cytokines are synthesized under various stimuli by a variety of cells of both the innate (monocytes, macrophages, dendritic cells) and adaptive (T- and B-cells) immune systems. The IL-17 family of cytokines includes six members, IL-17/IL-17A, IL-17B, IL-17C, IL-17D, IL-17E/IL-25, and IL-17F, which are produced by multiple cell types. IL-17 regulates the activities of NF-kappaB and mitogen-activated protein kinases. This cytokine can stimulate the expression of IL6 and cyclooxygenase-2 (PTGS2/COX-2), as well as enhance the production of nitric oxide (NO). High levels of IL-17 are associated with several chronic inflammatory diseases including rheumatoid arthritis, psoriasis, and multiple sclerosis.

## References

1. Andoh A, et al. (2002) IL-17 selectively down-regulates TNF-alpha-induced RANTES gene expression in human colonic subepithelial myofibroblasts. J Immunol. 169(4):1683-7.
2. Kotake S, et al. (1999) IL-17 in synovial fluids from patients with rheumatoid arthritis is a potent stimulator of osteoclastogenesis. J Clin Invest. 103(9):1345-52.
3. Laan M, et al. (1999) Neutrophil recruitment by human IL-17 via C-X-C chemokine release in the airways. J Immunol. 162(4):2347-52.