# Human IL17 / IL17A Protein, Biotinylated

Catalog Number: 12047-HNAE-B



## **General Information**

#### Gene Name Synonym:

CTLA-8; CTLA8; IL-17; IL-17A; IL17

#### **Protein Construction:**

A DNA sequence encoding the human IL17A (Q16552) (Ile20-Ala155) was expressed, with a N-terminal Met. The purified protein was biotinylated in vitro.

Source: Human

Expression Host: E. coli

**QC** Testing

**Purity:** > 95 % as determined by SDS-PAGE.

**Endotoxin:** 

< 1.0 EU per µg protein as determined by the LAL method.

Stability:

Samples are stable for up to twelve months from date of receipt at -70  $^{\circ}\mathrm{C}$ 

Predicted N terminal: Met

**Molecular Mass:** 

The recombinant IL17A consists of 137 amino acids and predicts a molecular mass of 15.7 kDa.

### Formulation:

Lyophilized from sterile Sterile PBS.

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**

#### Storage:

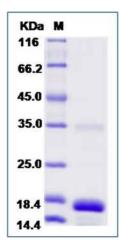
Store it under sterile conditions at -20  $^\circ\!\mathrm{C}$  to -80  $^\circ\!\mathrm{C}$  upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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 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.

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