**General Information**

**Gene Name Synonym:**
- CTLA-8; CTLA8; IL-17; IL-17A; IL17

**Protein Construction:**
A DNA sequence encoding the human IL17A (Q16552) (Met1-Ala155) was expressed.

**Source:** Human

**Expression Host:** CHO Stable Cells

**QC Testing**

**Purity:** (16.9+21.7+50.1) % as determined by SDS-PAGE

**Bio Activity:**

1. Measured by its binding ability in a functional ELISA. Immobilized human IL17A (Cat:12047-HNAS) at 10 μg/ml (100 μl/well) can bind human IL17Ra (Cat:10895-H03H), The EC50 of human IL17Ra (Cat:10895-H03H) is 20.0-48.0 ng/ml.

2. Measured by its ability to induce IL-6 secretion by NIH-3T3 mouse embryonic fibroblast cells in the presence of 20ng/mL TNFα. The ED50 for this effect is 0.2-1ng/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 ℃

**Predicted N terminal:** Gly 24

**Molecular Mass:**
The recombinant human IL17A consists of 132 amino acids and predicts a molecular mass of 15.1 KDa. It migrates as an approximately 16, 19, and 20 KDa band in SDS-PAGE under reducing conditions due to glycosylation.

**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**

**Storage:**
Store it under sterile conditions at -20℃ to -80℃ 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**

