Human IL17 / IL17A Protein (His Tag)
Catalog Number: 12047-H07B

General Information

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

Protein Construction:
A DNA sequence encoding the mature form of human IL17A (Q16552) (Gly24-Ala155) was expressed, with a polyhistidine tag at the N-terminus.

Source:
Human

Expression Host:
Baculovirus-Insect Cells

QC Testing

Purity:
> 98 % as determined by SDS-PAGE

Bio Activity:
Measured by its ability to induce IL-6 secretion by NIH3T3 mouse embryonic fibroblast cells in the presence of 20 ng/mL TNFα. The ED_{50} for this effect is 0.5-2.5 ng/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: His

Molecular Mass:
The recombinant human human IL17A consists of 152 amino acids and predicts a molecular mass of 17.3 KDa. It migrates as an approximately 19 KDa band in SDS-PAGE under reducing conditions.

Formulation:
Lyophilized from sterile 20mM Tris, 500mM NaCl, 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°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 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