Canine IL17 / IL17A Protein

Catalog Number: 70102-DNAE

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

IL17A, IL-17A

Protein Construction:

A DNA sequence encoding the canine IL17A (NP_001159350.1)(Gly26-Ala155) was expressed with a N-terminal Met.

Source: Canine

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 Canine IL17A (cat: 70102-DNAE) at 10 μg/ml (100 μl/well) can bind human IL17Ra (Cat:10895-H03H), The EC50 of human IL17Ra (Cat:10895-H03H) is 6.0-15.0 ng/ml.
2. Measured by its ability to induce IL-6 secretion by HFF human foreskin fibroblast?cells. The ED50 for this effect is typically 1-5 ng/mL.

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Met

Molecular Mass:

The recombinant canine IL17A comprises 131 amino acids and has a predicted molecular mass of 15.2 kDa. The apparent molecular mass of the protein is approximately 15 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.

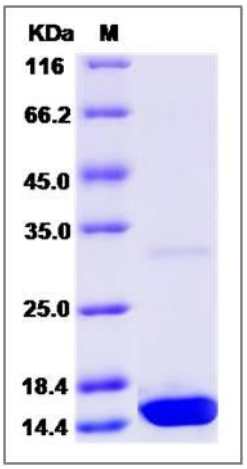
Usage Guide

Storage:

Store it under sterile conditions at -20℃ to -80℃ 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

IL17, also known as IL17a, is a member of the IL-17 family. 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. Members of this family have a highly conserved C-terminus containing a cysteine-knot fold structure. Most IL-17 proteins are secreted as disulfide-linked dimers, with the exception of IL-17B, which is secreted as a non-covalent homodimer IL17 is a proinflammatory cytokine produced by activated T cells. It 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 this cytokine are associated with several chronic inflammatory diseases including rheumatoid arthritis, psoriasis and multiple sclerosis. IL17 also induces stromal cells to produce proinflammatory and hematopoietic cytokines. It enhances the surface expression of the intracellular adhesion molecule-1 (ICAM-1) in fibroblasts.

References

1. Andoh A. et al., 2002, J Immunol. 169 (4): 1683-7.
2. Kotake S. et al., 1999, J Clin Invest. 103 (9): 1345-52.
3. Laan M. et al., 1999, J Immunol. 162 (4): 2347-52.
4. Shin HC. et al., 1999, Cytokine. 10 (11): 841-50.