Canine IL21 / Interleukin 21 Protein

Catalog Number: **70016-DNAE**

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Biological Solution Specialist

General Information

Gene Name Synonym:

IL-21

Protein Construction:

A DNA sequence encoding the canine IL21 (Q6L7I9) (His 18-Ser 146) was expressed, with an initial Met at the N-terminus.

Source: Canine

Expression Host: E. coli

QC Testing

Purity: > 97 % as determined by SDS-PAGE

Bio-Activity

Measured by its ability to induced Interferon gamma secretion by human natural killer lymphoma NK-92 cells.
The ED50 for this effect is typically 0.4-2 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 IL21 consists of 130 amino acids and has a calculated molecular mass of 15 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15KDa band as predicted.

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.

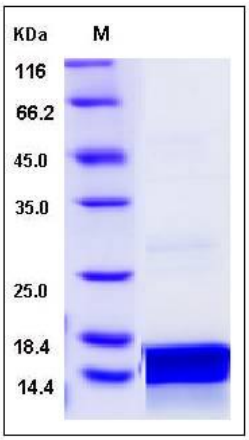
Usage Guide

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

IL21 is a cytokine with immunoregulatory activity. It is a member of the IL-15/IL-21 family. It is expressed in activated CD4-positive T-cells but not in CD8-positive T-cells, B-cells, or monocytes. IL21 may promote the transition between innate and adaptive immunity. It induces the production of IgG(1) and IgG(3) in B-cells (By similarity). IL21 may also play a role in proliferation and maturation of natural killer (NK) cells in synergy with IL15. The proliferation of mature B- and T-cells in response to activating stimuli may be regulated by IL21. In synergy with IL15 and IL18, IL21 stimulates interferon gamma production in T-cells and NK cells. During T-cell mediated immune response it may inhibit dendritic cells (DC) activation and maturation. Systemic treatment of IL-21 may be an effective means of mitigating the allergic response. IL-21 also may be a critical factor in the control of persistent viral infections.

References

1. Coquet JM. et al., 2007, J Immunol. 178 (5): 2827-34.
2. Wei L. et al., 2007, J Biol Chem. 282 (48): 34605-10.
3. Parrish-Novak J. et al., 2002, J Leukoc Biol. 72 (5): 856-63.
4. Kuchen S. et al., 2007, J Immunol. 179 (9): 5886-96.