

Human IL-17F / Interleukin-17F Protein (His Tag)

Catalog Number: 11855-H07H



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

IL-17F, ML-1, ML1

Protein Construction:

A DNA sequence encoding the human IL17F (NP_443104.1) (Arg 31-Gln 163) was expressed, with a polyhistidine tag at the N-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 80 % as determined by SDS-PAGE

Bio-Activity

1. Measured by its ability to bind human IL17Ra in a functional ELISA.
2. Measured by its ability to induce IL-6 secretion by HFF human foreskin fibroblast cells. The ED50 for this effect is typically 0.5-3 µg/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 IL17F consists of 153 amino acids and has a calculated molecular mass of 17.3 kDa. rhIL17F migrates as an approximately 24 kDa band in SDS-PAGE under reducing conditions and a 44 kDa band in non-reduced SDS-PAGE as the homodimer.

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.

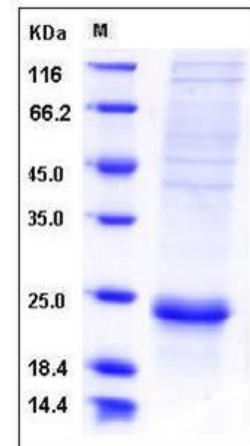
Usage Guide

Storage:

Store it under sterile conditions at -20°C to -80°C 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

Interleukin-17F, also known as IL-17F, Cytokine ML-1, Interleukin-24 and IL-24, is a secreted protein which belongs to the IL-17 family. IL-17 family members belong to a distinct category of cytokines that coordinate local tissue inflammation by inducing the release of pro-inflammatory and neutrophil-mobilizing cytokines. The importance of the IL-17 family in inflammatory and autoimmune disease is becoming increasingly apparent. IL-17F / IL-24 is a recently discovered member of the IL-17 family that has a number of biological activities through induction of various cytokines, chemokines, and mediators. IL-17F / IL-24 is expressed in activated, but not resting, CD4+ T-cells and activated monocytes. It is produced by several inflammatory cells, including activated T cells, in response to infectious and antigenic stimuli. Overexpression of IL-17A or IL-17F in the lungs results in induction of CXC chemokines and neutrophil recruitment. IL-17F / IL-24 is a cytokine that plays a role in tissue inflammation by inducing release of proinflammatory and neutrophil-mobilizing cytokines. Upregulated IL17F gene expression has been observed at sites of allergen challenge in the airways of patients with asthma, suggesting that IL-17F is involved in the pathophysiology of asthma. IL-17F / IL-24 stimulates the production of other cytokines such as IL-6, IL-8 and granulocyte colony-stimulating factor, and can regulate cartilage matrix turnover. It stimulates PBMC and T-cell proliferation. IL-17F / IL-24 also inhibits angiogenesis.

References

1. Kawaguchi, M. et al., 2006, J Allergy Clin Immunol. 117 (4): 795-801.
2. Hizawa, N. et al., 2006, Clin Exp Allergy. 36 (9): 1109-14.
3. Seiderer, J. et al., 2008, Inflamm Bowel Dis. 14 (4): 437-45.
4. Gomez-Rodriguez, J. et al., 2009, Immunity. 31 (4): 587-97.
5. Sutherland, A. P. et al., 2009, Diabetes. 58 (5): 1144-55.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

Fax : +86-10-51029969 • Tel: +86-400-890-9989 • <http://www.sinobiological.com>