

APA077Hu61 100µg

Active Interleukin 4 (IL4)

Organism Species: Homo sapiens (Human)

Instruction manual

FOR IN VITRO USE AND RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1th Edition (Apr, 2016)

[PROPERTIES]

Source: Eukaryotic expression.

Host: 293F cell

Residues: His25~Ser153

Tags: N-terminal His-tag

Purity: >95%

Endotoxin Level: <1.0EU per 1µg (determined by the LAL method).

Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% sarcosyl, 5% trehalose, and Proclin300.

Applications: SDS-PAGE; WB; ELISA; IP; CoIP; EMSA; Reporter Assays; Purification; Activity Assays; Amine Reactive Labeling; Activity Assays.
(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 9.3

Predicted Molecular Mass: 16.6kDa

Accurate Molecular Mass: 20kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

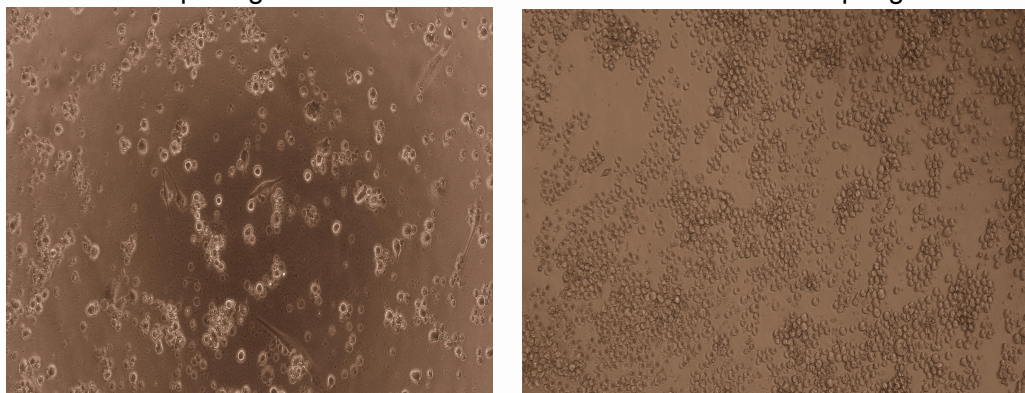
Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

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HKCDIT LQEIITLNS LTEQKTLCTE  
LVTDFIFAAS KNTTEKETFC RAATVLRQFY SHHEKDTRCL GATAQQFHRH  
KQLIRFLKRL DRNLWGLAGL NSCPVKEANQ STLENFLERL KTIMREKYSK  
CSS
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[ACTIVITY]

Interleukin 4 (IL4) is a cytokine that induces differentiation of naive helper T cells (Th0 cells) to Th2 cells. It plays many biological roles, including the stimulation of activated B-cell and T-cell proliferation, and the differentiation of B cells and monocyte. As reported, IL-4 would induce the differentiation of THP-1 cells into dendritic cells and macrophages in vitro. THP-1 cells were cultured in RPMI-1640 and stimulated with 2ng/mL IL-4, after 7 days of stimulation, cell bodies enlarged with extending pseudopodia, and vesicular bodies appeared within the cells, which showed a morphological characteristics of dendritic cells and macrophages.



A

B

Figure 1. Effect of IL4 on THP1 cells

(A) THP1 cells cultured in RPMI-1640, stimulated with IL-4;

(B) Unstimulated THP1 cells cultured in RPMI-1640

[IDENTIFICATION]

CACAGTGGATATCCCTTAGAGGAGATCMAACCTTGGAGGCTCAGAGCAGAGGACTCTGCGCGAGCTGGKGGTAAAGAGATCTTTCTCCCTCAAGACACACCTGAGAGGAAACCTTCAGGGCTGGGACTGTCTCCAGGAGTCTCAAGCCACATGAGAGGAGACTGCTGCTG
 H K C D I T L Q E I I K T L N S L T E Q K T L C T E L T V T D I F A A S K N T T E K E T F C R A A T V L R Q F Y S H E K D T R C L

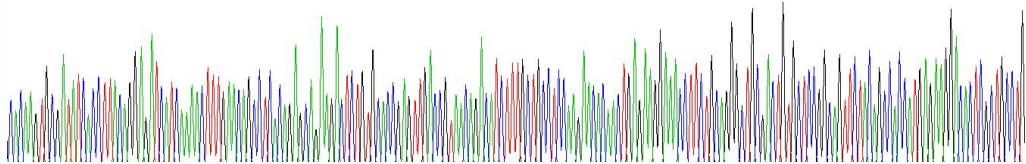


Figure 2. Gene Sequencing (extract)

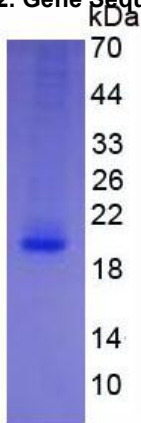


Figure 3. SDS-PAGE

Sample: Active recombinant IL4, Human

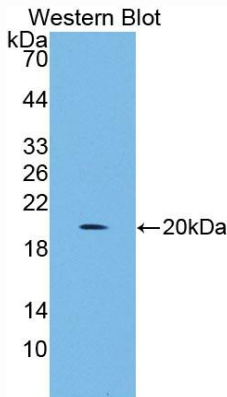


Figure 4. Western Blot

Sample: Recombinant IL4, Human;

Antibody: Rabbit Anti-Human IL4 Ab (PAA077Hu06)