

APA077Hu61 10µg

Active Interleukin 4 (IL4)

Organism Species: Homo sapiens (Human)

Instruction manual

FOR RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Eukaryotic expression.

Host: 293F cell

Residues: His25~Ser153

Tags: N-terminal His-tag

Purity: >95%

Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 5% trehalose.

Applications: Cell culture; Activity Assays; In vivo 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]

HKCDIT LQEIIKTLNS LTEQKTLCTE
LTVTDIFAAS KNTTEKETFC RAATVLRQFY SHHEKDTRCL GATAQQFHRH
KQLIRFLKRL DRNLWGLAGL NSCPVKEANQ STLENFLERL KTIMREKYSK
CSS

[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.

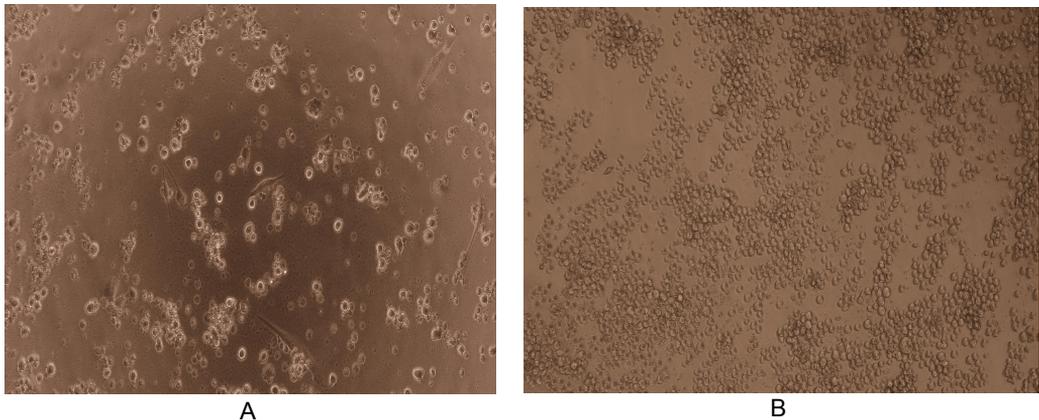


Figure 1. Effect of IL4 on THP1 cells

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

(B) Unstimulated THP1 cells cultured in RPMI-1640

[IDENTIFICATION]

CHLQIGYGGATATKACEITLGGGGASRATCMAHCITLGGAGGCTCAGCGAGCGAGGACTCTCTGGGCGGKSTLGGKGGTAMGGAGCATCTTCTCTGCTTGGAGAGCGACCTGGAGGGAMGCTCTGGAGGGCTGGGACTGTCTGGGGGCTCTCTGAGGACCAITGGAGGGAGCTGGCTGGCTD
 H K C D I T L Q E I I K T L N S I 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 V S H H E K D T R C L I

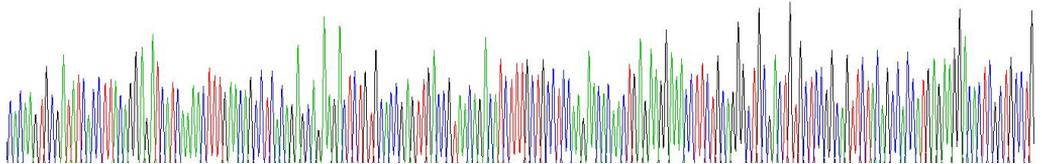


Figure 2. Gene Sequencing (extract)

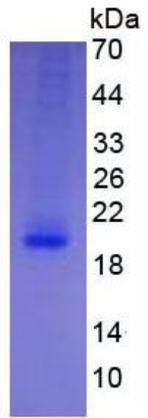


Figure 3. SDS-PAGE

Sample: Active recombinant IL4, Human

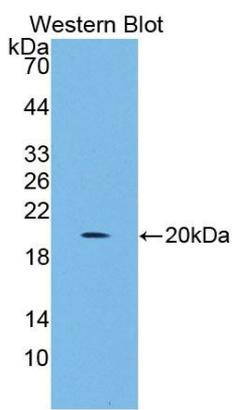


Figure 4. Western Blot

Sample: Recombinant IL4, Human;

Antibody: Rabbit Anti-Human IL4 Ab (PAA077Hu06)



[IMPORTANT NOTE]

The kit is designed for in vitro and research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.