APA062Hu01 100μg
Active Interleukin 16 (IL16)
Organism Species: Homo sapiens (Human)
Instruction manual

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

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.
Host: *E. coli*
Residues: Met1203~Ser1332
Tags: N-terminal His-tag
Purity: >98%
Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 0.05% sarcosyl and 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: 6.0
Predicted Molecular Mass: 17.1kDa
Accurate Molecular Mass: 17kDa 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 2-8ºC for one month.
Aliquot and store at -80ºC 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 37ºC 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]

MPDLNSST DSAASASAAS DVSVESTAEA TVCTVTLEKM SAGLGFSLEG
GKGSLHGDKP LTINRIFKGA ASEQSETVQP GDEILQLGGT AMQGLTRFEA
WNIIKALPDG PVTIVIRRKS LQSKETTAAG DS

[ACTIVITY]

Pro-IL16 (Interleukin16) is a 631 amino acid precursor molecule, which is then cleaved into different isoforms. Researches have shown that the recombinant human IL16, containing C-terminal 130 amino acids, has same bioactivity as the natural secreted human IL16. Besides, IL16 has been considered to stimulate the proliferation of Jurkat cells at low dose (10-9 M). Thus, a proliferation assay of recombinant human IL16 was conducted using Jurkat cells. Briefly, Jurkat cells were seeded into triplicate wells of 96-well plates at a density of 10, 000 cells/well in RPMI-1640 with the addition of various concentrations of IL16. After incubated for 72h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10μL of CCK-8 solution was added to each well of the plate, then the absorbance at 450nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37°C. Cell proliferation of Jurkat cells after incubation with IL16 for 72h observed by inverted microscope was shown in Figure 1. The CCK-8 data was shown in Figure 2. It was obvious that IL16 significantly promoted cell proliferation of Jurkat cells.

A B

Figure 1. Cell proliferation of Jurkat cells after stimulated with IL7.

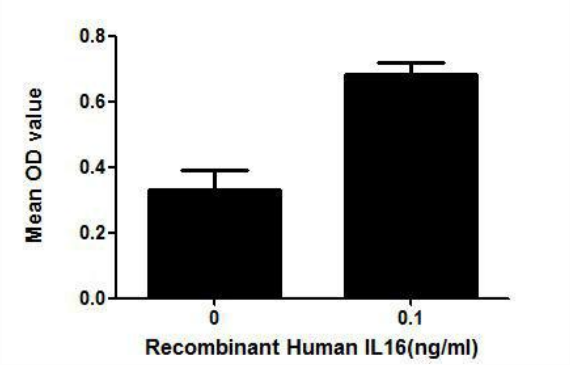

Figure 2. Cell proliferation of Jurkat cells after stimulated with IL7.

[IDENTIFICATION]

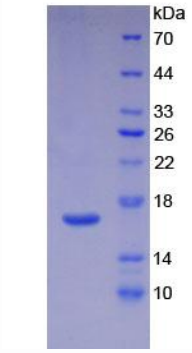

Figure 3. SDS-PAGE

Sample: Active recombinant IL16, Human

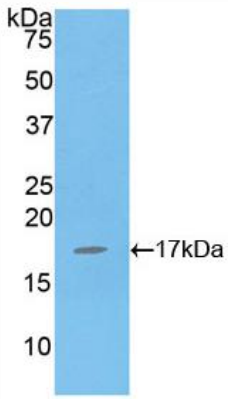

Figure 4. Western Blot

Sample: Recombinant IL16, Human;

Antibody: Rabbit Anti-Human IL16 Ab (PAA062Hu01)