APB688Hu01 100μg
Active Interleukin 21 (IL21)
Organism Species: *Homo sapiens* (Human)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.
Host: *E. coli*
Residues: Gln23~Ser155
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 0.05% sarcosyl and 5% trehalose.
Applications: Cell culture; Activity Assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 8.4
Predicted Molecular Mass: 45.5kDa
Accurate Molecular Mass: 45kDa 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 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]

QGQDRHMI RMRQLIDIVD QLKNYVNDLV PEFLPAPEDV ETNCEWSAFS CFQKAQLKSA NTGNNERIIN VSIKKLKRKP PSTNAGRRQK HRLTCPSCDS YEKKPPKEFL ERFKSLLQKM IHQHLSSRTH GSEDS

[ACTIVITY]

Interleukin-21 (IL21) is a cytokine that has potent regulatory effects on cells of the immune system, including natural killer (NK) cells and cytotoxic T cells that can destroy virally infected or cancerous cells. This cytokine induces cell division/proliferation in its target cells. IL21 may be a critical factor in the control of persistent viral infections. Besides, Interleukin 2 Receptor Gamma (IL2Rg) has been identified as an interactor of IL21, thus a binding ELISA assay was conducted to detect the interaction of recombinant human IL21 and recombinant human IL2Rg. Briefly, IL21 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to IL2Rg-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-IL21 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50μL stop solution to the wells and read at 450nm immediately. The binding activity of IL21 and IL2Rg was shown in Figure 1, and this effect was in a dose dependent manner.

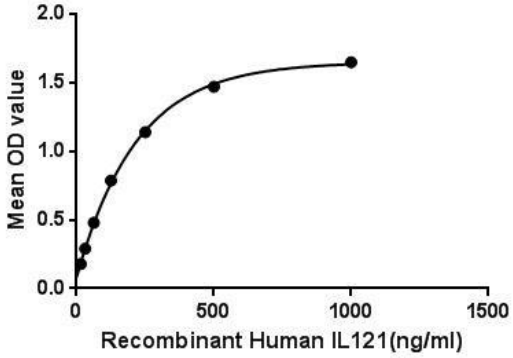

Figure 1. The binding activity of IL21 with IL2Rg.

[IDENTIFICATION]

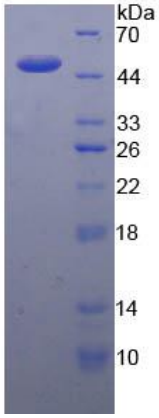

Figure 2. SDS-PAGE

Sample: Active recombinant IL21, Human

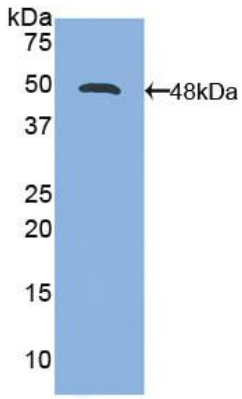

Figure 3. Western Blot

Sample: Recombinant IL21, Human;

Antibody: Rabbit Anti-Human IL21 Ab (PAB688Hu01)

[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.