

APB386Ra01 100µg
Active B-Lymphocyte Activation Antigen B7-1 (LAB7-1)
Organism Species: *Rattus norvegicus* (Rat)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

12th Edition (Revised in Aug, 2016)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Gly41~Gln248

Tags: N-terminal His-tag

Purity: >90%

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

Buffer Formulation: PBS, pH7.4, containing 0.01% SKL, 5%Trehalose .

Original Concentration: 200µg/mL

Applications: Cell culture; Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 5.0

Predicted Molecular Mass: 27.4kDa

Accurate Molecular Mass: 30kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 10mM PBS (pH7.4) 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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GGVSKSVREK ALLSCDYKFC SEEQSIHRIY WQKHDKMVLV VISGVPEVWP EYKNRTVYDI ANNYSFSLLG LILSDRGTYT  
CVVQRYEGGS YVVKHLTTVE LSVRADFPTP NITESGMPSA DIKRITCFAS GGFPKPRLSW LENGRELNGI NTTISQDPES  
ELYTISSQLD FNTTYDHFID CFIEYGDAHV SQNFTWEKPP EDPPEKQ
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[ACTIVITY]

Lymphocyte Activation Antigen B7-1 (CD80) is a membrane receptor that is activated by the binding of CD28 or CTLA-4. The activated protein induces T-cell proliferation and cytokine production. This protein can act as a receptor for adenovirus subgroup B and may play a role in lupus neuropathy. A functional binding ELISA assay was conducted to detect the interaction of recombinant rat CD80 with recombinant human IL10. Briefly, recombinant rat CD80 were diluted serially in PBS, with 0.01% BSA (pH7.4). Duplicate samples of 100 ul were then transferred to IL10-coated microtiter wells and incubated for 1h at 37 °C . Wells were washed with PBST and incubated for 1h with anti-CD80 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 µL stop solution to the wells and read at 450 nm immediately. The binding activity of recombinant rat CD80 and recombinant human IL10 was shown in Figure 1, the EC50 for this effect is 0.09 ug/mL.

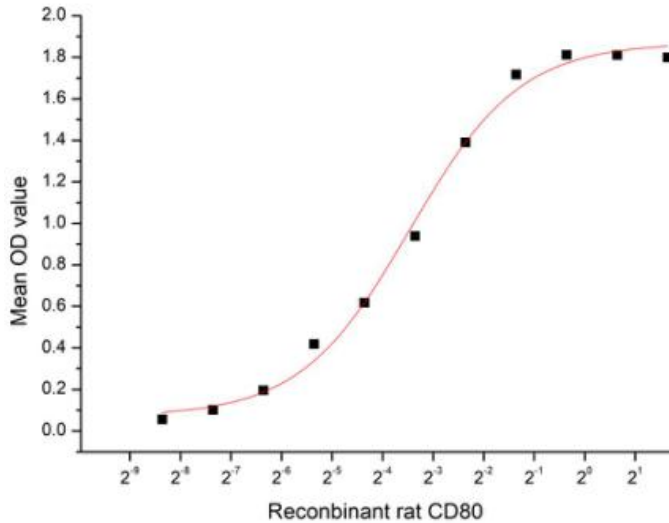


Figure 1. The binding activity of recombinant rat CD80 and recombinant human IL10

[IDENTIFICATION]

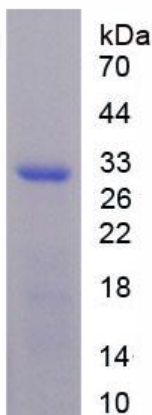


Figure 2. SDS-PAGE

Sample: Active recombinant LAB7-1, Rat

[IMPORTANT NOTE]

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