

APB505Mu01 100µg
Active Interleukin 3 Receptor Alpha (IL3Ra)
Organism Species: *Mus musculus (Mouse)*
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: Ser17~Pro166

Tags: N-terminal His-tag

Purity: >92%

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

Buffer Formulation: PBS, pH7.4, containing 0.01% SKL, 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: 6.1

Predicted Molecular Mass: 18.0kDa

Accurate Molecular Mass: 18kDa 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]

```
SDLA AVREAPPTAV TTPIQNLHID PAHYTLSDWP
APGADITTGA FCRKGRDIFV WADPGLARCS FQSLSLCHVT NFTVFLGKDR
AVAGSIQFPP DDDGDHEAAA QDLRCWVHEG QLSCQWERGK KATGDVHYRM
FWRDVRLGPA HNRECP
```

[ACTIVITY]

Interleukin 3 receptor alpha (IL3Ra), also known as CD123 (Cluster of Differentiation 123), is a subunit of the functional high-affinity mouse IL-3 receptor which is a heterodimer. The alpha subunit alone binds IL-3 with low affinity. The beta subunit does not bind IL-3 by itself but is required for the high-affinity binding of IL-3 to the heterodimeric receptor complex. Both the alpha and the beta subunits are members of the cytokine receptor superfamily. A binding ELISA assay was conducted to detect the interaction of recombinant mouse Interleukin 3 Receptor Alpha and recombinant mouse Interleukin 3. Briefly, IL3Ra were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to IL3-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-IL3Ra 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°C. Finally, add 50µL stop solution to the wells and read at 450nm immediately. The binding activity of IL3Ra and IL3 was shown in Figure 1, the EC50 was 10.66 ug/ml.

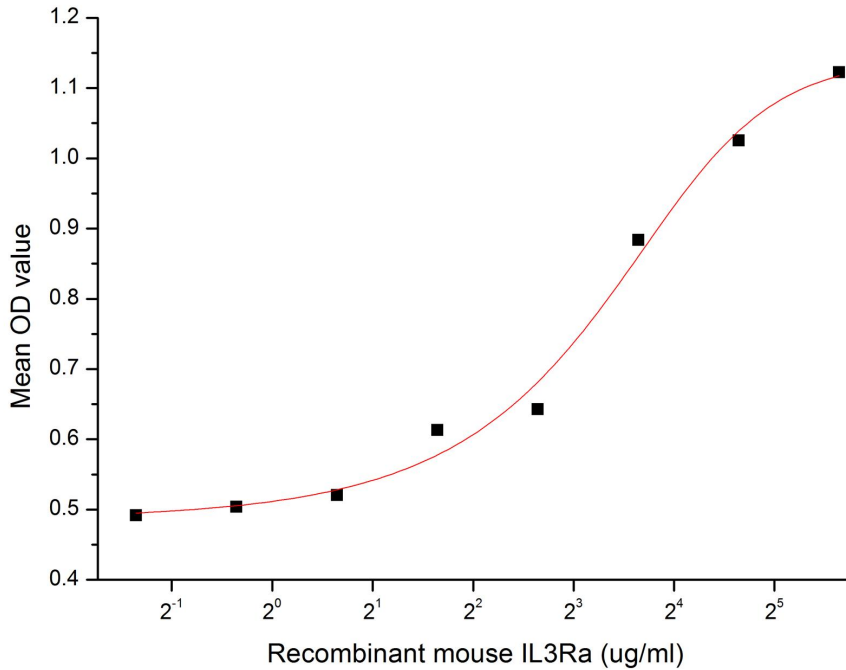


Figure 1. The binding activity of IL3Ra with IL3

[IDENTIFICATION]

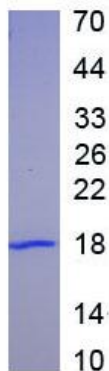


Figure 3. SDS-PAGE

Sample: Active recombinant IL3Ra, Mouse

[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.