

**MBS2097343**

**50µg**

**Active Interleukin 2 Receptor Beta (IL2Rb)**

**Organism Species: *Mus musculus (Mouse)***

***Instruction manual***

1st Edition (Apr, 2016)

## **[ PROPERTIES ]**

**Source:** Prokaryotic expression.

**Host:** *E. coli*

**Residues:** Ala27~Glu240

**Tags:** N-terminal His-tag

**Purity:** >92%

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

**Buffer Formulation:** 20mM Tris, 150mM NaCl, pH8.0, containing 0.01% skl 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:** 8.1

**Predicted Molecular Mass:** 26.3kDa

**Accurate Molecular Mass:** 27kDa 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.

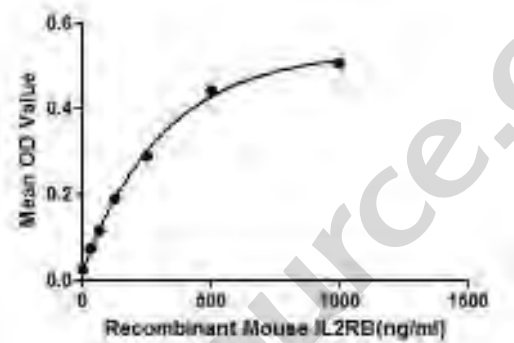
**Stability Test:** The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

## **[ SEQUENCE ]**

```
AVKN CSHLECFYNS RANVSCMWSH
EEALNVTTCV VHA KSNLRHW NKTCELT LVR QASWACNLIL GSFPEQS L T
SVDLLDINV V CWEEKGWRRV KTCDFHPFDN LRLVAPHS LQ VLHIDTQRCN
ISWKVSQVSH YIEPYLEFEA RRRLLGHSWE DASVLSLKQR QQWLFLEMLI
PSTSYEVQVR VKAQRNNTGT WSPWSQPLTF RTRPADPMKE
```

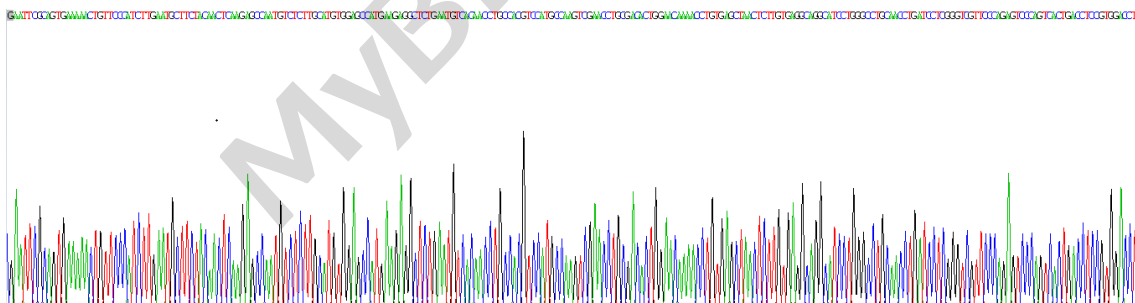
**[ ACTIVITY ]**

IL2RB (interleukin-2 receptor subunit beta) is a heterotrimeric protein expressed on the surface of certain immune cells, such as lymphocytes, which binds and responds to a cytokine called IL-2. Thus we have conducted a binding ELISA assay to detect the interaction of recombinant mouse IL2RB with recombinant mouse IL2. Briefly, IL2RB were diluted serially in PBS, with 0.01%BSA (pH 7.4). Duplicate samples of 100uL were then transferred to IL2-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-IL2RB 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 IL2RB with IL2 was shown in Figure 1 and this effect was in a dose dependent manner.

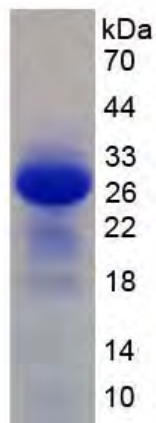


**Figure 1. The binding activity of IL2RB with IL2.**

**[ IDENTIFICATION ]**

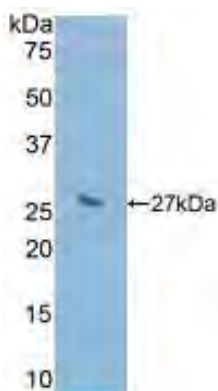


### Figure 2. Gene Sequencing (extract)



**Figure 3. SDS-PAGE**

**Sample: Active recombinant IL2Rb, Mouse**



**Figure 4. Western Blot**

**Sample: Recombinant IL2Rb, Mouse;**

**Antibody: Rabbit Anti-Mouse IL2Rb Ab (MBS2002997)**

### **[ 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.