

**APE110Mu01 100µg**  
**Active Ephrin A4 (EFNA4)**

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

FOR RESEARCH USE ONLY  
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

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13th Edition (Revised in Aug, 2023)

## **[ PROPERTIES ]**

**Source:** Prokaryotic expression.

**Host:** *E. coli*

**Residues:** Met1~Leu206

**Tags:** N-terminal His and GST 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:** 6.4

**Predicted Molecular Mass:** 52.8kDa

**Accurate Molecular Mass:** 54kDa 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.

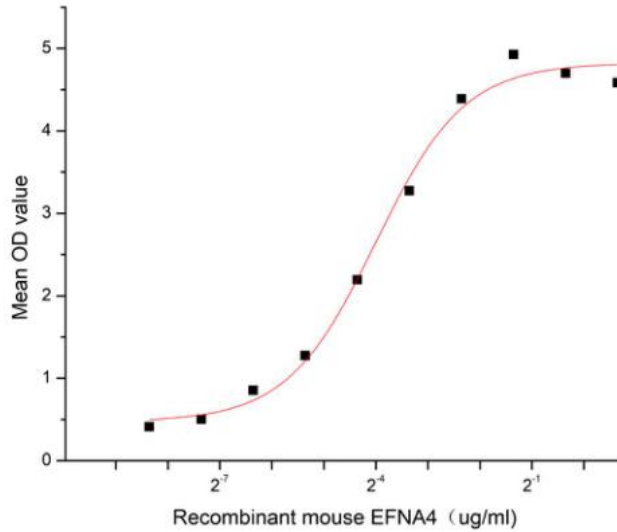
**Stability Test:** The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration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

## **[ SEQUENCE ]**

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MRLPLLRTV LWAALLGSRL PGCSSLRHPI YWNSSNPRLL RGDVVELGF NDYLDIFCPH
YESPGPPEGP ETFALYMVDW SGYEACTAEG ANAFQRWNCS MPFAPFSPVR FSEKIQRYP
FPLGFEFLPG EYYYYISVPT PESPGRCRLR QVSVCKESG SSHESAHPVG SPGESGTSGW
RGGHAPSPLC LLLLLLLPIL RLLRVL
```

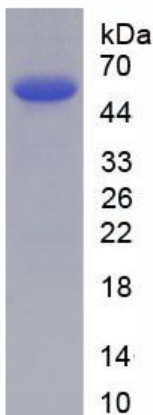
## **[ ACTIVITY ]**

Ephrin-A4, also known as EFNA4 and EFL-4, is a member of the ligand of the EPH family. It is mainly expressed in the spleen, lymph nodes, ovary, small intestine, and colon of adults, as well as in the heart, lungs, liver, and kidneys of the fetus. It is involved in the development of neurons, blood vessels, and epithelium by regulating cell migration, rejection, and adhesion. Ephrin-A4 has been shown to bind EphA1, EphA2, EphA3, EphA4, EphA5, EphA6, EphA7 and EphB1. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant mouse EFNA4 and recombinant mouse EPHA1. Briefly, EFNA4 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100  $\mu$ l were then transferred to EphA1-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST and incubated for 1h with anti-EFNA4 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37°C, 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  $\mu$ L stop solution to the wells and read at 450/630 nm immediately. The binding activity of recombinant mouse EFNA4 and recombinant mouse EphA1 was shown in Figure 1, the EC50 for this effect is 0.06  $\mu$ g/mL.



**Figure 1. The binding activity of recombinant mouse EFNA4 and recombinant mouse EphA1**

**[ IDENTIFICATION ]**



**Figure 2. SDS-PAGE**

**Sample: Active recombinant EFNA4, 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.