

**APE107Hu01 100µg**

**Active Ephrin A1 (EFNA1)**

**Organism Species: *Homo sapiens* (Human)**

***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:** Asp19~Ser182

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

**Purity:** >95%

**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:** 23.1kDa

**Accurate Molecular Mass:** 27kDa 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 ]**

```
DR HTVFWNSSNP KFRNEDYTIH VQLNDYVDII CPHYEDHSPA DAAMEQYILY  
LVEHEEYQLC QPQSKDQVRW QCNRPSAKHG PEKLSEKFQR FTPFTLGKEF KEGHSYYYIS  
KPIHQHEDRC LRLKVTVSGK ITHSPQAHDN PQEKRLAADD PEVRVLHSIG HS
```

## **[ ACTIVITY ]**

Ephrin-A1 (EFNA1), also known as EPLG1, LERK1, TNFAIP4, Immediate early response protein B61, is a member of the A-type ephrin family of cell surface proteins that function as ligands for the A-type Eph receptor tyrosine kinase family. EFNA1 plays an important role in angiogenesis and tumor neovascularization. EFNA1 widely affects tumor growth through enhancing tumor angiogenesis, malignant cell events and invasiveness. Ephrin Type A Receptor 1 (EPHA1) is one of high-affinity ligands for EFNA1, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human EFNA1 and recombinant mouse EPHA1. Briefly, biotin-linked EFNA1 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to EPHA1-coated microtiter wells and incubated for 1h at 37 °C . Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then 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 human EFNA1 and recombinant mouse EPHA1 was shown in Figure 1, the EC50 for this effect is 0.24 ug/mL.

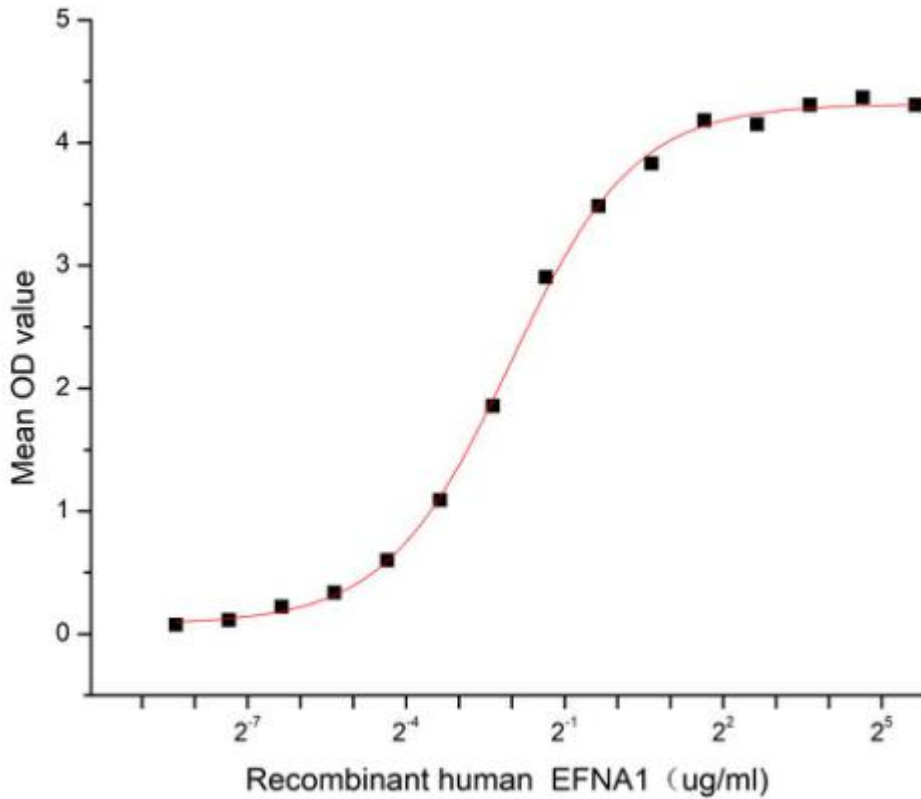


Figure 1. The binding activity of recombinant human EFNA1 and recombinant mouse EPHA1

[ IDENTIFICATION ]

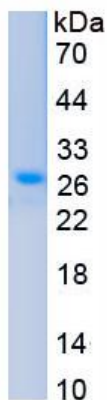


Figure 2. SDS-PAGE

**Sample: Active recombinant EFNA, Human**

**[ 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.