

APE109Hu01 100µg

Active Ephrin A3 (EFNA3)

Organism Species: *Homo sapiens* (Human)

Instruction manual

FOR RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Gly30~Ser238

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: 8.9

Predicted Molecular Mass: 27.2kDa

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]

```
G NRHAVYWNSS NQHLRREGYT VQVNVNDYLD IYCPHYNSSG VGPGAGPGPG
GGAEQYVLYM VSRNGYRTCN ASQGFKRWEC NRPHAPHSPI KFSEKFQRYA AFSLGYEFHA
GHEYYYISTP THNLHWKCLR MKVVFVCCAST SHSGEKPVPT LPQFTMGPNV KINVLEDFEG
ENPQVPKLEK SISGTSPKRE HLPLAVGIAF FLMTFLAS
```

[ACTIVITY]

Ephrin A3 (EFNA3) , also known as EFL2, EPLG3, LERK3, Ehk1-L, is a member of the Eph/ephrin tyrosine kinase family. EFNA3 is localized in cell membranes and was highly expressed in brain, skin, esophagus, skeletal muscle, spleen, thymus, prostate, testis, ovary, small intestine, peripheral blood leukocytes. EFNA3, like most genes in the ephrin family, plays a central role in embryonic development can associate with multiple signaling pathways involved in cell growth and tumor cell metastasis. Aberrant regulation of EFNA3 is associated with the occurrence and development of various types of cancer. Ephrin Type A Receptor 4 (EPHA4) is a receptor for members of the ephrin-A family. It can bind to EFNA3. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human EFNA3 and recombinant human EPHA4. Briefly, EFNA3 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to EPHA4-coated microtiter wells and incubated for 1h at 37 °C. Wells were washed with PBST and incubated for 1h with anti-EFNA3 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 μ L stop solution to the wells and read at 450/630 nm immediately. The binding activity of recombinant human EFNA3 and recombinant human EPFA4 was shown in Figure 1, the EC₅₀ for this effect is 0.4 μ g/mL.

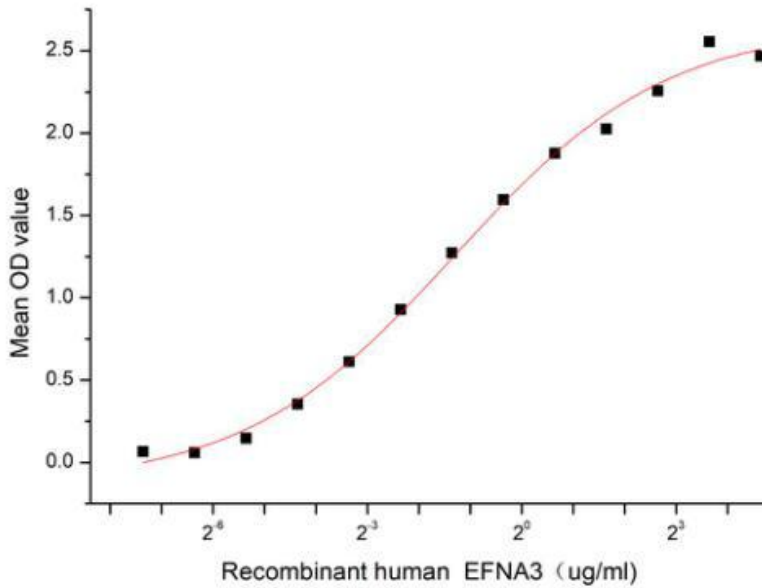


Figure 1. The binding activity of recombinant human EFNA3 and recombinant human EPFA4

[IDENTIFICATION]

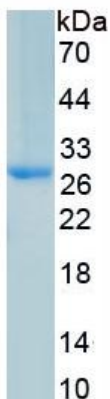


Figure 2. SDS-PAGE

Sample: Active recombinant EFNA3, 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.