APE111Hu01 100μg
Active Ephrin A5 (EFNA5)
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: Gln21~Asn203
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: 6.5
Predicted Molecular Mass: 24.9kDa
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 2-8ºC for one month.
Aliquot and store at -80ºC 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 37ºC 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]

QDPGSKAVAD RYAVYWNSSN PRFQRGDYHI
DVCINDYLDV FCPHYEDSVP EDKTERYVLY MVNFDGYSAC DHTSKGFKRW
ECNRPHSPNG PLKFSEKFQL FTPFSLGFEF RPGREYFYIS SAIPDNGRRS
CLKLKVFVRP TNSCMKTIGV HDRVFDVNDK VENSLEPADD TVHESAEPSR
GEN

[ACTIVITY]

Ephrin-A5, also known as EFNA5, is a member of the Ephrin family. EFNA5 is localized in cell membranes and was highly expressed in skin, brain, spleen, kidney, heart and fat. EFNA5 can bind to its receptors to play important physiological functions, such as participating in neurogenesis, angiogenesis, promoting cell proliferation and differentiation, balancing glucose homeostasis, maintaining lens development, regulating female mammalian reproduction, and mobilizing fat thermogenesis. EPHA10 is a receptor for members of the ephrin-A family. It binds to EFNA3, EFNA4 and EFNA5. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human EFNA5 and recombinant human EPHA10. Briefly, EFNA5 was diluted serially in PBS with 0.01% BSA (pH7.4). Duplicate samples of 100 μl were then transferred to EPHA10-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST and incubated for 1h with anti-EFNA5 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37℃, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50 μL stop solution to the

wells and read at 450/630 nm immediately. The binding activity of recombinant human EFNA5 and recombinant human EPHA10 was shown in Figure 1, the EC50 for this effect is 0.03 ug/mL.

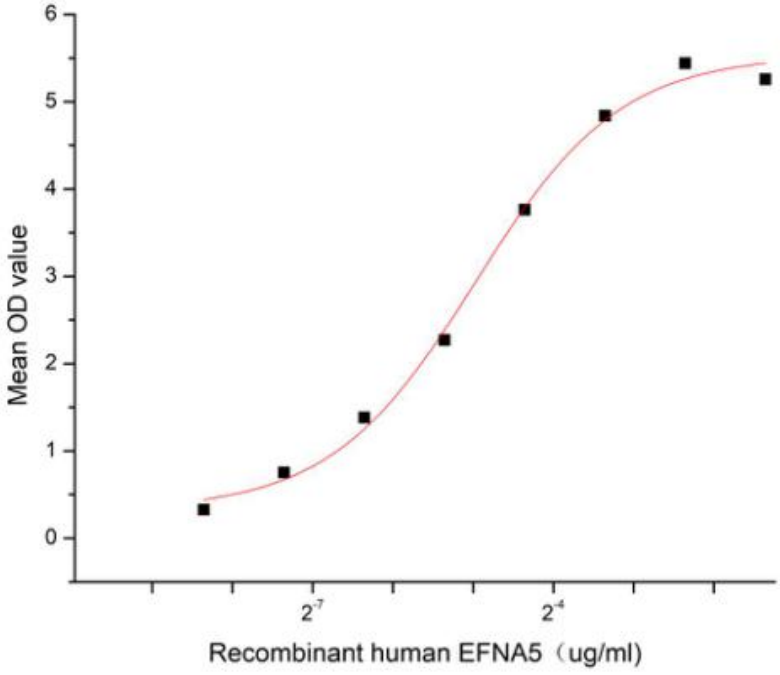

Figure 1. The binding activity of recombinant human EFNA5 and recombinant human EPHA10

[IDENTIFICATION]

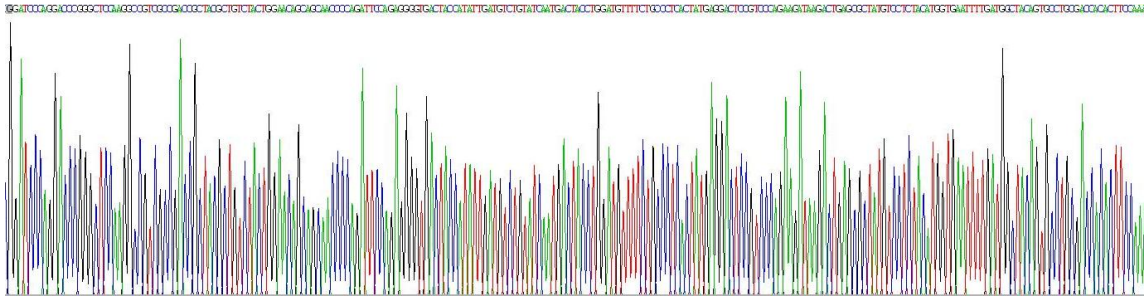

Figure 2. Gene Sequencing (extract)

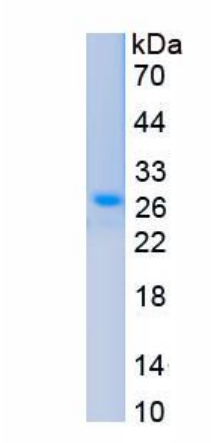

Figure 3. SDS-PAGE

Sample: Active recombinant EFNA5, 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.