APA994Hu01 100μg
Active Acid Phosphatase 1 (ACP1)
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: Met1~His158
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: 6.7
Predicted Molecular Mass: 19.2kDa
Accurate Molecular Mass: 20kDa 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]

MAEQATKSVL FVCLGNICRS PIAEAVFRKL VTDQNISENW RVDSAATSGY EIGNPPDYRG
QSCMKRHGIP MSHVARQITK EDFATFDYIL CMDESNLRDL NRKSNQVKTC KAKIELLGSY
DPQKQLIIED PYYGNDSDFE TVYQQCVRCC RAFLEKAH

[ACTIVITY]

Acid phosphatase locus 1 (ACP1) is a low molecular weight protein tyrosine phosphatase that has been shown to be an important regulator of insulin receptor signaling. EFNA1 is a kind of receptor tyrosine kinase which can Interact with ACP1. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human EFNA1 and recombinant human ACP1. Briefly, EFNA1 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μl were then transferred to ACP1-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST and incubated for 1h with anti-EFNA1 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. When recombinant human ACP1 is immobilized at 2 ug/ml (100 ul/well), the concentration of EFNA1 that produces 50% optimal binding response is found to be approximately 0.21 ug/ml.

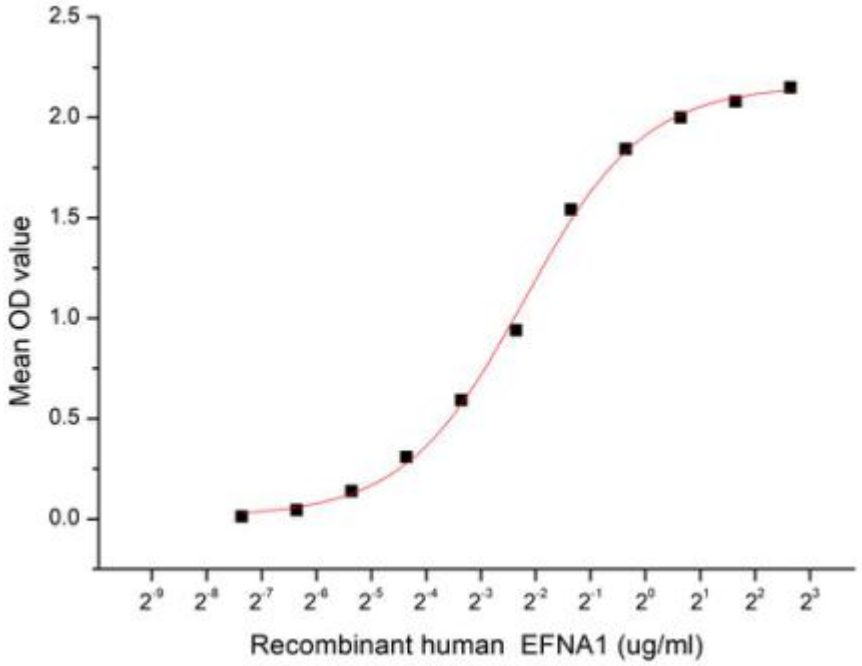

Figure 1. The binding activity of recombinant human EFNA1 and recombinant human ACP1

[IDENTIFICATION]

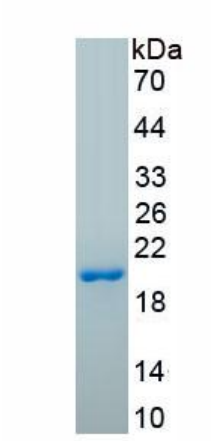

Figure 2. SDS-PAGE

Sample: Active recombinant ACP1, 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.