APA141Hu04 100μg
Active Plasminogen Activator, Urokinase Receptor (uPAR)
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: Leu13~Gly305
Tags: N-terminal His-tag
Purity: >80%
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: 35.9kDa
Accurate Molecular Mass: 36&32kDa 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]

LHTCVPAS WGLRCMQCKT NGDCRVEECA LGQDLCRTTI
VRLWEEGEEL ELVEKSCTHS EKTNRTLSYR TGLKITSLTE VVCGLDLCNQ
GNSGRAVTYS RSRYLECISC GSSDMSCERG RHQSLQCRSP EEQCLDVVTH
WIQEGEEGRP KDDRHLRGCG YLPGCPGSNG FHNNDTFHFL KCCNTTKCNE
GPILELENLP QNGRQCYSCK GNSTHGCSSE ETFLIDCRGP MNQCLVATGT
HEPKNQSYMV RGCATASMCQ HAHLGDAFSM NHIDVSCCTK SGCNHPDLDV
QYRSG

[ACTIVITY]

Urokinase-type plasminogen activator receptor (uPAR) is a glycosylphosphatidylinositol (GPI)-anchored protein. Besides regulating proteolysis, uPAR could also activate many intracellular signaling pathways that promote cell motility, invasion, proliferation and survival through cooperating with transmembrane receptors. uPAR is overexpressed across a variety of tumors and is associated with cancer invasion and metastasis. ITGb1 has been identified as an interactor of uPAR, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human uPAR and recombinant human ITGb1. Briefly, uPAR was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μl were then transferred to ITGb1-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST and incubated for 1h with anti-uPAR 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 uPAR and recombinant human ITGb1 was shown in Figure 1, the EC50 for this effect is 0.165 ug/mL.

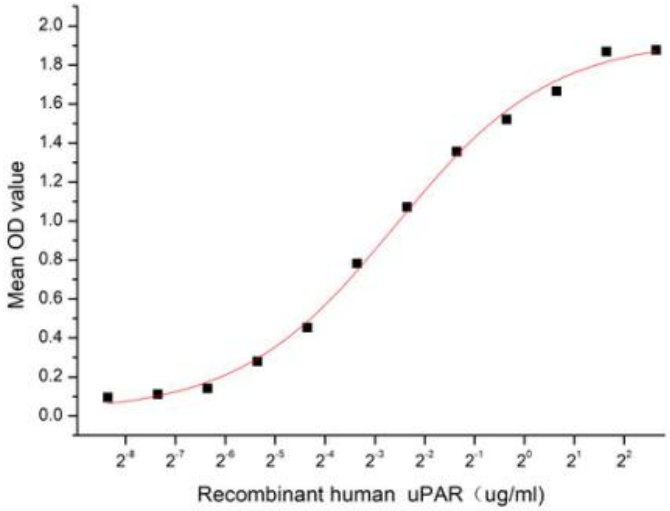

Figure 1. The binding activity of recombinant human uPAR and recombinant human ITGb1

[IDENTIFICATION]

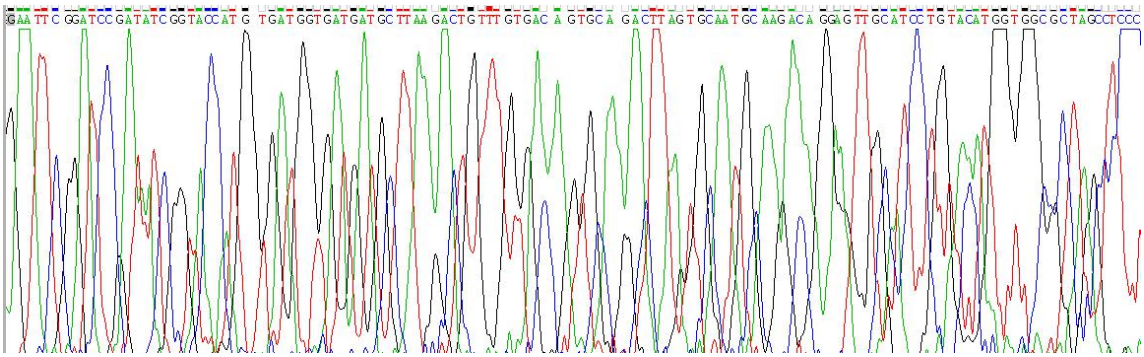

Figure 2. Gene Sequencing (extract)

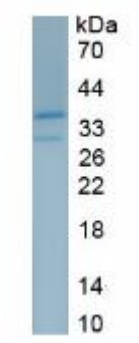

Figure 3. SDS-PAGE

Sample: Active recombinant uPAR, 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.