

APA141Ra01 100µg
Active Plasminogen Activator, Urokinase Receptor (uPAR)
Organism Species: *Rattus norvegicus* (Rat)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

12th Edition (Revised in Aug, 2016)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Thr17~Asn212

Tags: N-terminal His-tag

Purity: >90%

Traits: Freeze-dried powder

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: 23.2kDa

Accurate Molecular Mass: 25kDa 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]

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TCVP ASQGLRCIQE ESNQDCLVEE CALGQDLCRT  
TVLREWEDAE ELEVVTRGCA HKEKTNRTMS YRMGSVIVSL TETVCATNLC  
NRPRPGARGR PFPRGRYLEC ASCTSLDQSC ERGREQSLQC RYPTHECIEV  
VTLQSTERSV KDEPYTKGCG SLPGCPGTAG FHSNQTFHFL KCCNFTQCNG  
GPVLDLQSLP PN
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[ACTIVITY]

Plasminogen Activator, Urokinase Receptor (uPAR) is the receptor for urokinase plasminogen activator and, given its role in localizing and promoting plasmin formation, likely influences many normal and pathological processes related to cell-surface plasminogen activation and localized degradation of the extracellular matrix. The urokinase receptor (uPAR) was identified as the membrane receptor of the serine protease urokinase (uPA), thereby implicated in the plasminogen activation cascade and regulation of pericellular proteolysis, thus a binding ELISA assay was conducted to detect the interaction of recombinant rat uPAR and recombinant human uPA. Briefly, biotin-linked uPAR were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to uPA-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 uPAR and uPA was shown in Figure 1, the EC50 for this effect is 0.223 µg/mL.

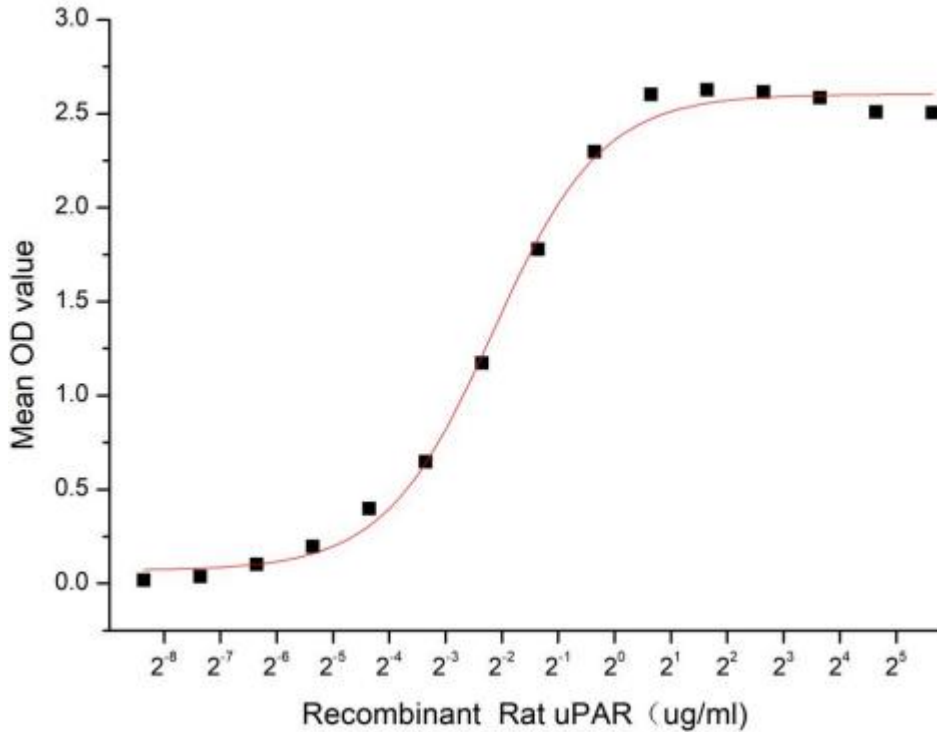


Figure 1. The binding activity of recombinant Rat uPAR and recombinant human uPA

[IDENTIFICATION]

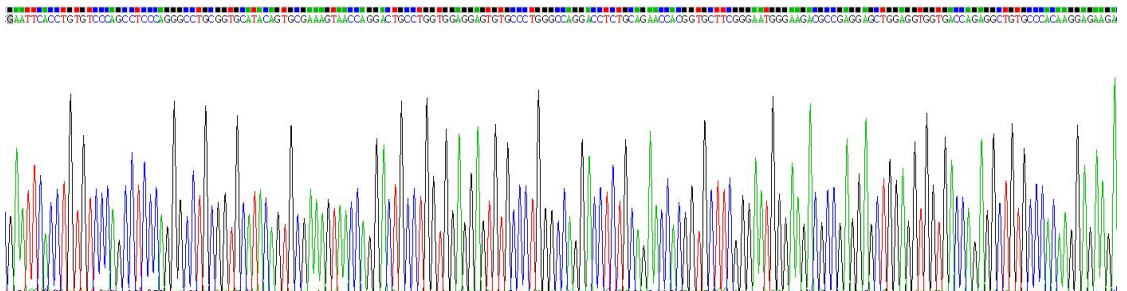


Figure 2. Gene Sequencing (extract)

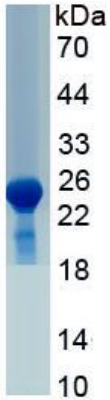


Figure 3. SDS-PAGE

Sample: Active recombinant uPAR, Rat

[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.