

APB236Hu02 100µg

Active Plasminogen (Plg)

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: Glu20~Asn810

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% Sarcosyl, 5%Trehalose .

Original Concentration: 200µg/mL

Applications: Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 8.2

Predicted Molecular Mass: 92.1kDa

Accurate Molecular Mass: 92kDa 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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EPLDDYVNTQGASLFSVTKKQLGAGSIEECAKCEDEEFTCRAFQYHSKEQQCVIMAENRKSSIIIRMRDVVLFEEKVYLSECKTGNGK
NYRGTMSTKNGITCQKWSSTSPHRPRFSPATHPSEGLEENYCRNPNDPQGPWCYTTDPEKRYDYCDILECEEECMHCSGENYDGKISK
TMSGLECQAWDSQSPHAGYIPSKFPNKNLKNYCRNPDRFLRPWCFTTDPNKRWELCDIPRCTTPPPSSGPTYQCLKGTGENYRGNVAV
TVSGHTCQHWSAQTPHHTNPENFPCKNLDENYCRNPDGKRAPWCHTTNSQVRWEYCKIPSCDSSPVSTEQLAAPTAPPELTPVVQDCYH
GDGQSYRGTSSTTTTGKKCQSWSSMTPHRHQKTPENYPNAGLTMYNCRNPADKGPWCFTTDPVSRWEYCNLKKCSGTEASVVA PPPVVL
LPDVEPTSEEDCMFNGKGYRGKRATTVTGTPCQDWAQEPHRHSIFTPETNPRAGLEKNYCRNPDGVDGVPWCYTTNPRKLYDYCDVPQ
CAAPSFDCGKPKQVEPKKCPGRVVGCCVAHPHSWPQVSLRTRFGMHFCGGTLISPEWVLTAAHCLEKSPRSPSSYKVLGAHQEVNLEPHV
QEIEVSRLFLBPTRKDIALKLSSPAVITDKVIPACLPSPNYVVA DRTECFITGWGETQGTFGAGLLKEAQLPVIENKVCNRYEFLNGRV
QSTELCAGHLAGGTDSCQGDGGPLVCFEKDKYILQGVTSWGLGCARPKNKPGVYVRVSRFVTWIEGVMRNN
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[ACTIVITY]

Plasminogen (Plg) is a glycoprotein predominantly synthesized in the liver and circulates in plasma as the zymogen (inactive precursor) of plasmin. It serves as a central mediator in fibrinolysis, extracellular matrix (ECM) degradation, and tissue remodeling processes. Upon activation by tPA or uPA, Plg is converted into plasmin—a broad-spectrum serine protease that participates in thrombolysis, cell migration, and inflammatory responses. Notably, emerging evidence suggests that Plg interacts with ECE1; this interaction may modulate Plg’s activation or spatial localization in vascular environments and inflammatory contexts. To detect the activity of recombinant Plg, a functional ELISA assay was performed to evaluate the interaction between recombinant human Plg and recombinant human ECE1. Briefly, biotin-linked Plg were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100µl were then transferred to ECE1-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 50µl stop solution to the wells and read at 450nm immediately. The binding activity of Plg and ECE1 was shown in Figure 1, the EC50 for this effect is 0.01µg/mL.

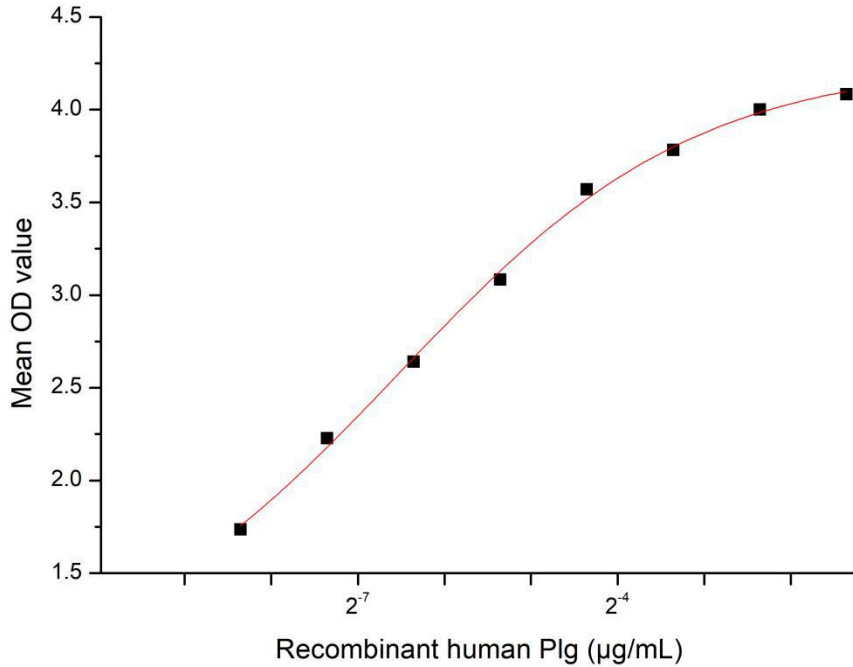


Figure 1. The binding activity of recombinant human Plg and recombinant human ECE1

[IDENTIFICATION]

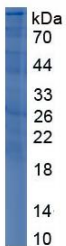


Figure 3. SDS-PAGE

Sample: Active recombinant Plg, 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.