

APA022Hu02 100µg
Active Endothelial protein C receptor (EPCR)
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: Ser18~Ser210

Tags: N-terminal His and GST 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: 6.7

Predicted Molecular Mass: 52.0kDa

Accurate Molecular Mass: 54kDa 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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SQDASDGLQRLHMLQISYFRDPYHVWYQGNASLGGHLTHVLEGPDTNTTIIQLQPLQEPESWARTQSGL  
QSYLLQFHGLVRLVHQERTLAFPLTIRCF LGCELPPEG SRAHVFFEVAVNGSSVFSFRPERALWQADTQ  
VTSGVVTF TLQQLNAYNRTRYELREFLEDTCVQYVQKHISAENTKGSQTSRSYTS
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[**ACTIVITY**]

Endothelial protein C receptor (EPCR) also known as CD201, is a transmembrane glycoprotein expressed on vascular endothelial cells and functions as a negative regulator of thrombosis. It is expressed most strongly in the endothelial cells of arteries and veins in heart and lung. Mature human EPCR consists of a 193 amino acid (aa) extracellular domain (ECD), a 21 aa transmembrane segment, and a 7 aa cytoplasmic tail. Within the ECD, human EPCR shares 63% and 66% aa sequence identity with mouse and rat EPCR, respectively. EPCR inhibits thrombosis through its interactions with Protein C, activated Protein C (APC), and Coagulation Factors VII, and VIIa. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human EPCR and recombinant rat Coagulation Factor VII (F7). Briefly, EPCR was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to F7-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST and incubated for 1h with anti-EPCR pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37°C, 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 μ L stop solution to the wells and read at 450/630nm immediately. The binding activity of recombinant human EPCR and recombinant rat F7 was shown in Figure 1, the EC50 for this effect is

0.06 ug/mL.

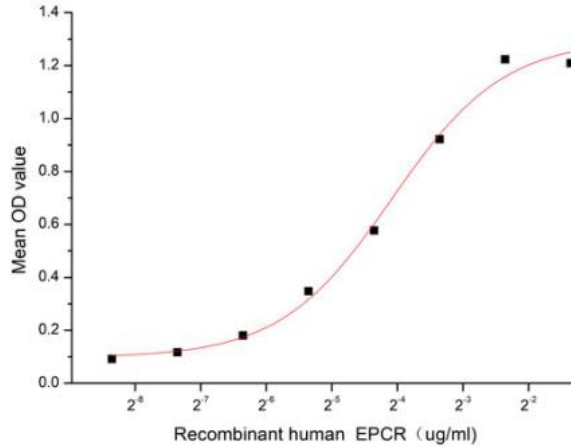


Figure 1. The binding activity of recombinant human EPCR and recombinant rat Coagulation Factor VII

[IDENTIFICATION]



Figure 2. SDS-PAGE

Sample: Active recombinant EPCR, 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.