

Endothelial protein C receptor (EPCR) Active Protein | EPCR active protein

Active Endothelial protein C receptor (EPCR)

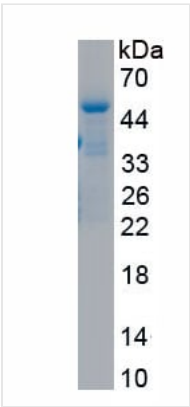
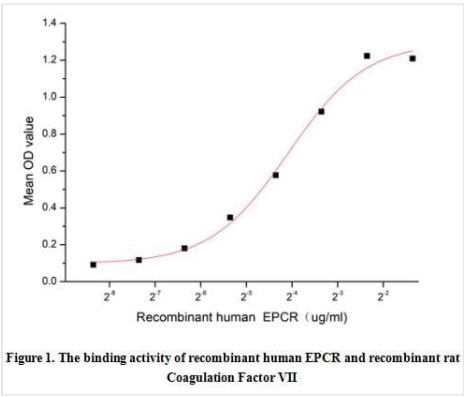
CATALOG # AAA161658	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Endothelial protein C receptor (EPCR); Active Endothelial protein C receptor (EPCR); Endothelial protein C receptor; CD201; PROCR; CCCA ;CCD41; BA42O4.2; EPCR; Endothelial Protein C Receptor; Cell Cycle; Centrosome-Associated Protein; Activated Protein C Receptor4; EPCR active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 80% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Ser18~Ser210
Applicable Applications for EPCR active protein	Activity Assay, Cell Culture
Species	Human
Expression System	Prokaryotic expression
Tag	N-terminal His and GST Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	6.7
Research Area	Signal transduction, CD & Adhesion molecule, Hematology
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months



Bioactivity

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 ul were then transferred to F7-coated microtiter wells and incubated for 1h at 37 degree 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 degree C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50 uL 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.

SDS-PAGE

Figure. SDS-PAGE

ADDITIONAL INFORMATION

Product Categories/Family for EPCR active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	48146013
UniProt Accession #	Q9UNN8; Q14218; Q6IB56; Q96CB3; Q9ULX1; B2RC04
Molecular Weight	26,671 Da
NCBI Official Full Name	PROCR
UniProt Protein Name	Endothelial protein C receptor
UniProt Gene Name	PROCR
UniProt Synonym Gene Names	EPCR; APC receptor
UniProt Entry Name	EPCR_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.