

DESCRIPTION

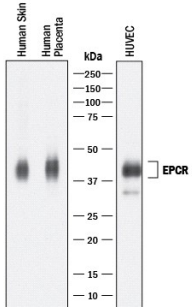
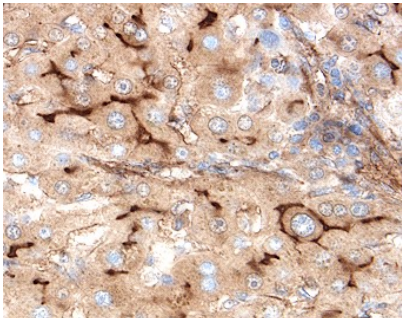
Species Reactivity	Human
Specificity	Detects human EPCR in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 20% cross-reactivity with recombinant mouse EPCR is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human EPCR Ser18-Ser210 Accession # Q9UNN8
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the [Technical Information](#) section on our website.

	Recommended Concentration	Sample
Western Blot	0.25 µg/mL	See Below
Flow Cytometry	0.25 µg/10 ⁶ cells	HUVEC human umbilical vein endothelial cells
Immunohistochemistry	1-15 µg/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

<p>Western Blot</p>  <p>Detection of Human EPCR by Western Blot. Western blot shows lysates of human skin tissue, human placenta tissue, and HUVEC human umbilical vein endothelial cells. PVDF membrane was probed with 0.25 µg/mL of Goat Anti-Human EPCR Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2245) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for EPCR at approximately 40-45 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p>  <p>EPCR in Human Liver. EPCR was detected in immersion fixed paraffin-embedded sections of human liver using 1.7 µg/mL Goat Anti-Human EPCR Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2245) overnight at 4 °C. Tissue was stained with the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

EPCR is a type I transmembrane glycoprotein in the CD1/MHC family. It is expressed most strongly in the endothelial cells of arteries and veins in heart and lung. Membrane bound EPCR is released by metalloproteolytic cleavage to generate the soluble receptor. Protein C is a vitamin K-dependent serine protease that plays a major role in blood coagulation. Binding of Protein C to EPCR leads to the proteolytic activation of PAR1 (protease-activated receptor 1) on endothelial cells and subsequent up-regulation of Protein C-induced genes. The extracellular domain of human and mouse EPCR shares approximately 61% amino acid sequence homology.