

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse EPCR in direct ELISAs and Western blots. In direct ELISAs, approximately 5% cross-reactivity with recombinant human EPCR is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse EPCR Ala17-Ser214 Accession # Q64695
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.

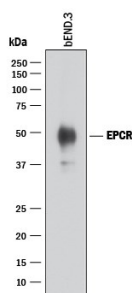
APPLICATIONS

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	0.5 µg/mL	See Below
Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
Immunocytochemistry	5-15 µg/mL	See Below
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Mouse EPCR, see our available Western blot detection antibodies
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

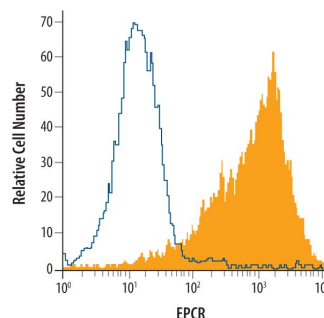
DATA

Western Blot



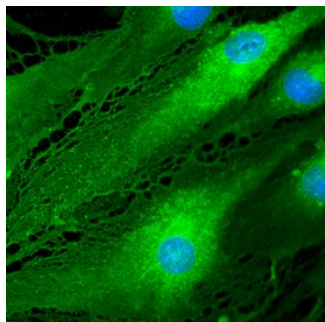
Detection of Mouse EPCR by Western Blot. Western blot shows lysates of bEnd.3 mouse endothelioma cell line. PVDF membrane was probed with 0.5 µg/mL of Goat Anti-Mouse EPCR Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2749) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # Catalog # HAF017). A specific band was detected for EPCR at approximately 48 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Flow Cytometry



Detection of EPCR in bEnd.3 Mouse Cell Line by Flow Cytometry. bEnd.3 mouse endothelioma cell line was stained with Goat Anti-Mouse EPCR Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2749, filled histogram) or control antibody (Catalog # Catalog # AB-108-C, open histogram), followed by Allophycocyanin-conjugated Anti-Goat IgG Secondary Antibody (Catalog # Catalog # F0108).

Immunocytochemistry



EPCR in bEnd.3 Mouse Cell Line. EPCR was detected in immersion fixed bEnd.3 mouse endothelioma cell line using Goat Anti-Mouse EPCR Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2749) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 493-conjugated Anti-Goat IgG Secondary Antibody (green; Catalog # NL003) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

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	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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

Protein C is a vitamin K-dependent serine protease that plays a major role in blood coagulation. Binding of Protein C to EPCR (CD201) leads to the proteolytic activation of PAR1 (protease-activated receptor 1) on endothelial cells and subsequent up-regulation of Protein C-induced genes. 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. The extracellular domain of human and mouse EPCR shares approximately 61% amino acid sequence homology.