

PRODUCT INFORMATION



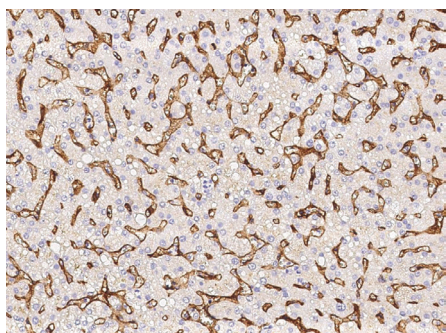
EPCR/CD201 Rabbit Monoclonal Antibody (Clone 041)

Item No. 38080

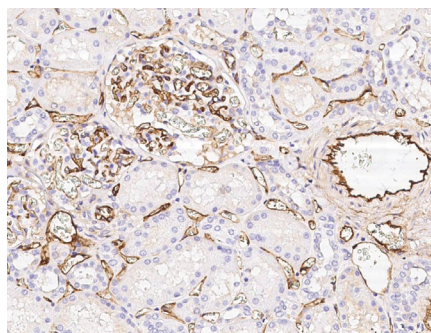
Overview and Properties

Contents:	This vial contains 50 or 100 µl of protein A-affinity purified monoclonal antibody.
Synonyms:	Activated Protein C Receptor, APC Receptor, Endothelial Cell Protein C Receptor, Endothelial Protein C Receptor, PROCR, Protein C Receptor
Immunogen:	Recombinant human EPCR
Cross Reactivity:	(+) EPCR
Species Reactivity:	(+) Human; (-) Mouse
Form:	Liquid
Storage:	-80°C (as supplied)
Stability:	≥1 year
Storage Buffer:	0.2 µm filtered solution in PBS
Clone:	041
Host:	Rabbit
Isotype:	IgG
Application:	Immunohistochemistry paraffin (IHC-P); the recommended starting dilution is 1:100-1:500. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Images



Immunohistochemical staining of human PROCR in formalin-fixed and paraffin-embedded human liver using EPCR/CD201 Rabbit Monoclonal Antibody (Clone 041) at a dilution of 1:200.



Immunohistochemical staining of human PROCR in formalin-fixed and paraffin-embedded human kidney using EPCR/CD201 Rabbit Monoclonal Antibody (Clone 041) at a dilution of 1:200.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Endothelial protein C receptor (EPCR), also known as CD201, is a type I transmembrane glycoprotein involved in coagulation and hemostasis, cytoprotection, and innate immunity.¹ It is composed of a signal peptide, $\alpha 1$ and $\alpha 2$ domains, which share homology with CD1d and bind to phosphatidylcholine, a transmembrane domain, and a cytoplasmic tail.^{2,3} EPCR is expressed on the surface of endothelial cells and can be cleaved by disintegrin and metalloproteinase domain-containing protein 17 (ADAM17/TACE) to release soluble EPCR, which is a process known as shedding and is induced by thrombin and pro-inflammatory mediators, including IL-1 β , TNF- α , and phorbol esters.^{4,5} Binding of protein C to EPCR facilitates its activation by the thrombin-thrombomodulin complex, which can then inactivate factor Va and factor VIIIa to promote anticoagulation, and EPCR-associated activated protein C cleaves proteinase-activated receptor 1 (PAR1) to initiate cytoprotective signaling.³ EPCR is also involved in inflammation, malaria pathogenesis, and cancer metastasis.¹ Knockout of *EPCR* protects against needle-induced joint bleeding in a mouse model of hemophilia A.⁵ SNPs in *EPCR* are associated with venous thromboembolism (VTE).⁶ Cayman's EPCR/CD201 Rabbit Monoclonal Antibody (Clone 041) can be used for immunohistochemistry paraffin (IHC-P).

References

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