abcam

ab322227

Alexa Fluor® 647 Anti-EPCR/CD201 antibody [EPR26267-19]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	Alexa Fluor® 647
Excitation/Emission	Ex: 650nm, Em: 665nm
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR26267-19
Purification technique	Affinity purification Protein A
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Tested

Species	Mouse
Dilution info	1/50
Notes	-

Flow Cyt

Tested

Species	Mouse
Dilution info	1/50000
Notes	-

Target data

See full target information Procr

Function	Binds activated protein C. Enhances protein C activation by the thrombin-thrombomodulin complex; plays a role in the protein C pathway controlling blood coagulation.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle, Store in the dark

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

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Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	EPCR also known as CD201 stands for Endothelial Protein C Receptor. It is a glycoprotein with a molecular mass of approximately 46 kDa. EPCR is expressed mainly on endothelial cells which line the interior surface of blood vessels. This receptor plays a mechanical role in binding to protein C a zymogen that is converted to activated protein C (APC) by thrombin-thrombomodulin complex. By facilitating the activation of protein C EPCR contributes to the regulation of blood coagulation and inflammation processes.
Biological function summary	The EPCR is part of the protein C anticoagulant pathway where it acts as a cofactor. EPCR is vital in enhancing the activation of protein C on the endothelial surface reducing coagulation activity. It interacts closely with thrombomodulin and protein C to form this complex preventing excessive thrombus formation and contributing to vascular integrity. Apart from its anticoagulant role EPCR also modulates inflammatory responses supporting its function as a bridge between coagulation and inflammation.
Pathways	EPCR lies within the protein C anticoagulation pathway and the endothelial signaling pathways. Its primary partner in the anticoagulation pathway is APC which degrades activated factors Va and VIIIa providing a check against coagulation. Additionally EPCR's interaction with APC and thrombomodulin links this protein to the endothelial signaling pathway where it affects cell survival and inflammation regulation. This interaction is essential to maintain hemostatic balance and control vascular responses to inflammatory stimuli.

Associated diseases and disorders	EPCR associates with conditions like thrombosis and sepsis. In thrombosis inadequate expression or function of EPCR can lead to uncontrolled blood clotting due to insufficient activation of protein C. Sepsis a severe inflammatory response to infection shows abnormal modulation of the protein C pathway where EPCR's role becomes pivotal. Additionally APC which interacts directly with EPCR is critical in the pathological states of these diseases highlighting the therapeutic potential in targeting EPCR pathway.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

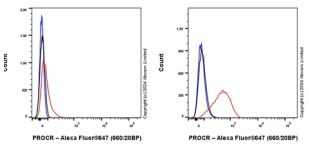
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

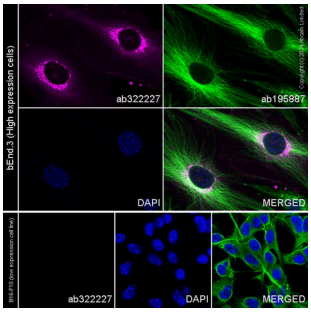
2 product images



Flow Cytometry - Alexa Fluor® 647 Anti-EPCR/CD201 antibody [EPR26267-19] (ab322227)

Flow cytometric analysis of B16-F10 (mouse skin melanoma cell, Left) / bEnd.3 (mouse brain endothelial cell, Right) cells labelling EPCR/CD201 with ab322227 at 1/50000 dilution (0.001ug) (Red) compared with a Rabbit IgG monoclonal [EPR25A] - Isotype Control (Alexa Fluor® 647) (ab199093) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Gated on viable cells.
Low expression: B16-F10 (PMID: 19188668).



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-EPCR/CD201 antibody [EPR26267-19] (ab322227)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized bEnd.3 (mouse brain endothelial cell) cells labelling EPCR/CD201 with ab322227 at 1/50 (10.0 ug/ml) dilution (Green).

Confocal image showing cytoplasmic staining in bEnd.3 cell line (shown in magenta). The counterstain was observed in green. Nuclear DNA was labelled with DAPI (shown in blue).
Low expression: B16-F10 (PMID: 19188668).
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

ab195887 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 488) was used to counterstain tubulin at 1/ab195887 200 2.5ug/ml dilution (Magenta). The Nuclear counterstain was DAPI (Blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.