abcam

ab316877

Alexa Fluor® 555 Anti-EMR1/ADGRE1 (F4/80) antibody [EPR23225-94]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	Alexa Fluor® 555
Excitation/Emission	Ex: 555nm, Em: 565nm
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	EPR23225-94
Purification technique	Affinity purification Protein A
Specificity	This antibody has not been tested in endogenous samples.
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Tested

Species	Transfected cell line - Human
Dilution info	1/250
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt

Tested

Species	Transfected cell line - Human
Dilution info	1/50
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-P

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Transfected cell line - Human
Dilution info	-

Notes	-

Target data

See full target information ADGRE1

Function	Orphan receptor involved in cell adhesion and probably in cell-cell interactions specifically involving cells of the immune system. May play a role in regulatory T-cells (Treg) development.

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	EMR1 also known as ADGRE1 or EGF-like module-containing mucin-like hormone receptor-like 1 is a protein that belongs to the adhesion G protein-coupled receptor family. It has a predicted mass of approximately 147 kDa. This protein localizes primarily to the cell membrane and expresses in myeloid cells such as macrophages and dendritic cells. Its role involves cell signaling and interaction with other membrane proteins. EMR1 contains an extracellular domain with epidermal growth factor (EGF)-like modules which are critical for cell adhesion processes.
Biological function summary	The function of EMR1 plays an important role in the immune system especially in myeloid cell function. It does not exist alone but rather forms a part of the complex cell adhesion molecules contributing to cell-cell interactions and migrations. By doing so it supports immune surveillance and inflammation processes. It impacts the differentiation and survival of macrophages hence directly influencing host defense.
Pathways	EMR1's involvement extends to several cellular signal transduction pathways. Notably it plays a part in the immune response pathway and the GPCR signaling pathway where it interacts with related proteins such as CD11b and other integrins. These pathways ensure proper communication and activation of immune cells which is important for a coordinated immune response. Its interaction with other adhesion molecules suggests an integrated role in initiating signaling cascades that affect immune cell positioning and activation.
Associated diseases and disorders	EMR1 shows a connection to disorders like inflammation and atherosclerosis. Its expression level often changes in chronic inflammatory conditions implicating it potentially in disease progression. The aberrant signaling of EMR1 can influence pathologies associated with dysregulated immune responses. Moreover in atherosclerosis EMR1's interaction would likely involve proteins like ICAM-1 and VCAM-1 further linking its activity to vascular inflammation and plaque formation.

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.

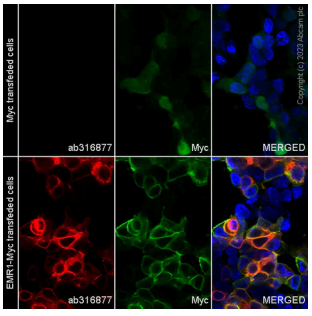
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In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
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2 product images



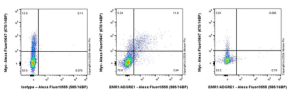
Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 555 Anti-EMR1/ADGRE1 (F4/80) antibody [EPR23225-94] (ab316877)

EMR1/ADGRE1 (F4/80) Immunocytochemistry/ Immunofluorescence staining of 293T (Human embryonic kidney epithelial cell) transfected with myc tagged EMR1/ADGRE1 construct using rabbit Anti-EMR1/ADGRE1 (F4/80) antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized 293T (Human embryonic kidney epithelial cell) transfected with myc tagged EMR1/ADGRE1 construct cells labelling EMR1/ADGRE1 with ab316877 at 1/250 (2.0 ug/ml) dilution.

Confocal image showing positive staining in HEK-293T cell line transfected with myc-tagged EMR1/ADGRE1 expression vector (shown in red). The counterstain was observed in green. Nuclear DNA was labeled with DAPI (shown in blue).
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

ab202008 Anti-Myc tag mouse monoclonal antibody (Alexa Fluor® 488) was used to counterstain tubulin at 1/100 5ug/ml dilution.



Flow Cytometry - Alexa Fluor® 555 Anti-EMR1/ADGRE1 (F4/80) antibody [EPR23225-94] (ab316877)

Flow cytometric analysis of Isotype (Left) / 293T cells transfected with a human EMR1/ADGRE1 expression vector containing a myc tag (Middle) / 293T cells transfected with an empty vector containing a myc tag (Right) cells labelling EMR1/ADGRE1 with ab316877 at 1/50 dilution (1 ug)/Middle and Right compared with a Rabbit IgG monoclonal [EPR25A] - Isotype Control (Alexa

Fluor® 555) (ab208569) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

Gated on viable cell.

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