abcam

ab322230

Alexa Fluor® 647 Anti-EMR1/ADGRE1 antibody [EPR23225-94]

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	EPR23225-94
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

Flow Cyt (Intra)

Tested

Species	Transfected cell line - Human
Dilution info	1/500
Notes	-

Predicted

Species	Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Transfected cell line - Human
Dilution info	1/100
Notes	-

Expected

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

Flow Cyt

Expected

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

Not recommended

Species	Transfected cell line - Human
Dilution info	-

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	The EMR1/ADGRE1 (F4/80) is a protein known for its role in cellular adhesion and migration. It is also referred to as EMR1 or ADGRE1 and is a member of the class B seven-span transmembrane receptor family. The protein has a molecular mass of about 90 kDa and primarily expresses on the surface of tissue-resident macrophages. Its expression serves as a marker to identify murine macrophages thereby providing a way to study subsets of immune cells within diverse tissues.
Biological function summary	This protein influences the regulation of immune responses and macrophage actions. It does not appear to work alone; it forms part of a larger receptor complex that participates in interaction with other cellular components modulating biological processes such as phagocytosis and the release of cytokines. These roles position the ADGRE1 macrophage in the immune surveillance of tissues influencing homeostasis and response to injury or infection.
Pathways	ADGRE1/EMR1 (F4/80) takes part in signal transduction pathways related to the innate immune response. It interacts with proteins involved in macrophage activation and cellular signaling such as TLR4 and CD14. These pathways are instrumental in mediating responses to pathogens and tissue damage integrating

	the ADGRE1 marker in processes that initiate and propagate immune signaling cascades.
Associated diseases and disorders	ADGRE1/EMR1 (F4/80) shows involvement in inflammatory conditions and autoimmune disorders. For example it is relevant to research in diseases like inflammatory bowel disease and rheumatoid arthritis where macrophage-mediated inflammation plays a significant role. In these conditions the protein interacts with cytokines like TNF-alpha linking its expression to clinical manifestations and therapeutic targets. This association makes this protein a potential focal point for understanding and potentially mitigating disease pathology.

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

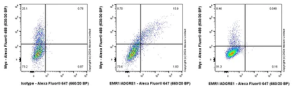
We do not recommend this combination. It is not covered by our product promise.

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



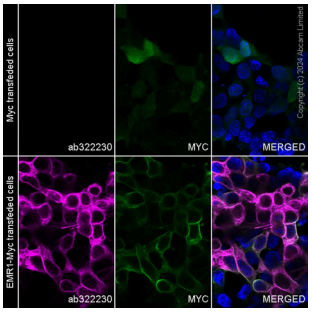
Flow Cytometry (Intracellular) - Alexa Fluor® 647 Anti-EMR1/ADGRE1 antibody [EPR23225-94] (ab322230)

EMR1/ADGRE1 Flow Cytometry (Intracellular) staining using rabbit Anti-EMR1/ADGRE1 antibody

Flow cytometric analysis of 2% paraformaldehyde fixed 0.1% Tween-20 permeabilized Isotype (Left) / 293T cells transfected with a human EMR1/ADGRE1expression vector containing a Myc tag

(Middle) / 293T cells transfected with an empty vector containing a Myc tag (Right) cells labelling EMR1/ADGRE1 with ab322230 at 1/500 dilution (0.1ug) / Middle and Right compared with a Rabbit IgG monoclonal [EPR25A] - Isotype Control (Alexa Fluor® 647) (ab199093) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Live cells were surface stained with ab, then fixed with 2% PFA followed by intracellular staining with Myc-tag conjugated to Alexa Fluor® 488.



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-EMR1/ADGRE1 antibody [EPR23225-94] (ab322230)

EMR1/ADGRE1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-EMR1/ADGRE1 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 ab322230 at 1/100 (5.0 ug/ml) dilution (Green).

Confocal image showing positive staining in 293T cell line transfected with a myc-tagged EMR1/ADGRE1 expression vector (shown in magenta). The counterstain was observed in green. Nuclear DNA was labelled 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 (Magenta). The Nuclear counterstain was DAPI (Blue).

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