abcam

ab323939

Alexa Fluor® 647 Anti-JAM-C antibody [EPR29224-576]

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	EPR29224-576
Purification technique	Affinity purification Protein A

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/2500

Notes	-

ICC/IF

Expected

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

Target data

See full target information JAM3

Function	Junctional adhesion protein that mediates heterotypic cell-cell interactions with its cognate receptor JAM2 to regulate different cellular processes (PubMed:11590146, PubMed:11823489). Plays a role in homing and mobilization of hematopoietic stem and progenitor cells within the bone marrow. At the surface of bone marrow stromal cells, it contributes to the retention of the hematopoietic stem and progenitor cells expressing JAM3 (PubMed:11590146, PubMed:24357068). Plays a central role in leukocytes extravasation by facilitating transmigration through the endothelium (By similarity). Plays a role in spermatogenesis where JAM2 and JAM3, which are respectively expressed by Sertoli and germ cells, mediate an interaction between both cell types and play an essential role in the anchorage of germ cells onto Sertoli cells and the assembly of cell polarity complexes during spermatid differentiation (By similarity). Also functions as a counter-receptor for ITGAM, mediating leukocyte-platelet interactions and is involved in the regulation of transepithelial migration of polymorphonuclear neutrophils (PMN) (PubMed:12208882, PubMed:15194813). Plays a role in angiogenesis (PubMed:23255084). Plays a role in the regulation of cell migration (Probable). During myogenesis, it is involved in myocyte fusion (By similarity). Soluble form of JAM-C. Promotes chemotaxis of vascular endothelial cells and stimulates angiogenesis.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	-20°C
Appropriate long-term storage conditions	-20°C

Notes

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.

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.

Alexa Fluor® is a registered trademark of Molecular Probes, Inc, a Thermo Fisher Scientific Company. The Alexa Fluor® dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor® dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). As this product contains the Alexa Fluor® dye the sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: in manufacturing; (ii) to provide a service, information, or data in return for payment (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are sold for use in research. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing@thermofisher.com.

Supplementary info

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

Activity summary	Junctional adhesion molecule-C (JAM-C) is a cell adhesion molecule belonging to the immunoglobulin superfamily also known as JAM3. It has a mass around 37 kDa. JAM-C is present on endothelial cells various immune cells and some epithelial cells. This protein functions mechanically in maintaining tight junctions that control paracellular permeability and are important in cell-to-cell interactions.
Biological function summary	Junctional adhesion molecule-C plays significant roles in leukocyte migration angiogenesis and the maintenance of vascular endothelial barrier function. JAM-C is part of a larger junctional adhesion molecule complex which includes JAM-A and JAM-B that collectively influence these processes. Its expression in tissues such as the heart and brain suggests specialized roles in physiological functions including cardiovascular regulation and CNS barriers.
Pathways	Junctional adhesion molecule-C is an integral component of the leukocyte transmigration and angiogenesis pathways. These pathways collaborate to allow immune cells to pass through vessel walls a fundamental process in immune surveillance and response. Additionally JAM-C interacts with integrins and other adhesion molecules facilitating cellular communication necessary for tissue repair and growth.

Associated diseases and disorders	Dysregulation of junctional adhesion molecule-C expression associates with inflammatory diseases and cancer. Altered JAM-C levels have implications in autoimmune disorders where abnormal leukocyte extravasation occurs. Its connection to cancer involves interactions with proteins like VE-cadherin contributing to increased tumor angiogenesis and metastasis making it a potential target for therapeutic intervention in these conditions.

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

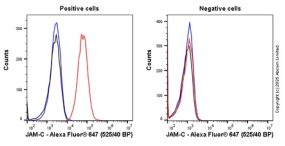
We do not recommend this combination. It is not covered by our product promise.

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.

1 product image



Flow Cytometry - Alexa Fluor® 647 Anti-JAM-C antibody [EPR29224-576] (ab323939)

JAM-C Flow Cytometry staining using rabbit Anti-JAM-C antibody

Flow cytometry overlay histogram showing left JEG-3 positive cells and right negative HeLa stained with ab323939 (red line). The cells were incubated in 1x PBS containing 10% normal goat serum to block non-specific protein-protein interactionfollowed by the antibody (ab323939) (1x 10^6 in 100µl at 0.2 µg/ml (1/2500)) for 30min on ice.

Isotype control antibody (black line) was Alexa Fluor® 647 Rabbit IgG, monoclonal [EPR25A] - Isotype Control used at the same concentration and conditions as the primary antibody.

Unlabelled sample (blue line) was also used as a control.

Acquisition of >5000 events were collected using a 40 mW Red laser (638nm) and 660/10 bandpass filter.

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