abcam

ab275180

Alexa Fluor® 647 Anti-Junctional Adhesion Molecule 1/JAM-A antibody [EPR23246-275]

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	EPR23246-275
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

Tested

Species	Mouse
Dilution info	1/2500
Notes	-

ICC/IF

Expected

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

Target data

See full target information F11r

Function	Seems to play a role in epithelial tight junction formation. Appears early in primordial forms of cell junctions and recruits PARD3 (PubMed:11447115). The association of the PARD6-PARD3 complex may prevent the interaction of PARD3 with JAM1, thereby preventing tight junction assembly (PubMed:11447115). Plays a role in regulating monocyte transmigration involved in integrity of epithelial barrier (PubMed:9660867). Ligand for integrin alpha-L/beta-2 involved in memory T-cell and neutrophil transmigration (By similarity). Involved in platelet activation (By similarity).

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	Junctional Adhesion Molecule 1 also known as JAM-A or JAM-A protein is a member of the immunoglobulin superfamily. It has a mass of roughly 32 kDa. This molecule functions in tight junctions of epithelial and endothelial cells playing an important role in regulating paracellular permeability. JAM-A is expressed in tissues where tight junctions are present including the skin gastrointestinal tract and endothelia throughout the body.
Biological function summary	JAM-A functions as a cell adhesion molecule influencing processes like leukocyte transmigration and epithelial barrier formation. It does not act alone but rather forms complexes with other proteins at cell junctions. JAM-A interacts with other junctional proteins like occludin and claudins contributing to the structure and function of tight junctions.
Pathways	JAM-A participates in cellular processes involving inflammation and cell migration. It is an integral part of the signal transduction pathways that regulate leukocyte migration an important aspect of immune response. JAM-A is also associated with G-protein coupled receptors in these pathways highlighting its role in regulating intracellular signaling that affects cell adhesion and migration.

Associated diseases and disorders	JAM-A has connections with cancer progression and cardiovascular diseases. Its overexpression has been linked to several cancers including breast cancer due to its role in enhancing cell migration and invasion. In cardiovascular diseases JAM-A interacts with platelet-endothelial cell adhesion molecule-1 (PECAM-1) influencing the inflammatory response within vascular tissues. Understanding these interactions can aid in developing therapeutic strategies targeting JAM-A in related diseases.

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

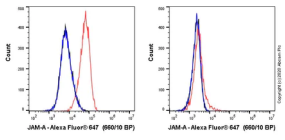
We do not recommend this combination. It is not covered by our product promise.

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-Junctional Adhesion Molecule 1/JAM-A antibody [EPR23246-275] (ab275180)

Junctional Adhesion Molecule 1/JAM-A Flow Cytometry staining using rabbit Anti-Junctional Adhesion Molecule 1/JAM-A antibody

Flow cytometry overlay histogram showing left bEND.3 (mouse brain endothelioma cell line) positive cells and right negative Neuro2a (mouse neuroblastoma cell line) cells stained with ab275180 (red line). The cells were incubated in 1x PBS containing 10% normal goat serum to block non-specific protein-protein interaction followed by the antibody (ab275180) (1x 10^6 in 100µL at 0.2µg/mL (1/2500)) for 30 min on ice.

Isotype control antibody (black line) was Rabbit IgG (monoclonal) Alexa Fluor® 647 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'.