abcam

ab156586

Anti-Junctional Adhesion Molecule 2/JAM-B antibody [EPR2489(2)]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR2489(2)
Purification technique	Affinity purification Protein A
Concentration	1.159 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000 - 1/10000
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/100 - 1/500

Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information JAM2

Function	Junctional adhesion protein that mediates heterotypic cell-cell interactions with its cognate receptor JAM3 to regulate different cellular processes (PubMed:11590146, PubMed:11823489, PubMed:24357068). Plays a role in homing and mobilization of hematopoietic stem and progenitor cells within the bone marrow (PubMed:24357068). 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 not only transmigration but also tethering and rolling of leukocytes along the endothelium (PubMed:12239159). Tethering and rolling of leukocytes are dependent on the binding by JAM2 of the integrin alpha-4/beta-1 (PubMed:12070135). 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 an inhibitory somatodendritic cue that prevents the myelination of non-axonal parts of neurons (By similarity). During myogenesis, it is involved in myocyte fusion (By similarity). May also play a role in angiogenesis (By similarity).

Storage

Shipped at conditions	Conditional Ambient
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

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.

Supplementary info

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

Activity summary	Junctional Adhesion Molecule 2 also known as JAM-B JAM B or JAM Protein is a member of the immunoglobulin superfamily of proteins. It has a molecular mass of approximately 38 kDa and is expressed on the surface of endothelial and epithelial cells. JAM-B plays an important role in regulating cellular adhesion facilitating the interaction between adjacent cells. This target is important in maintaining cell polarity and integrity making it an adhesion example of the body's cellular architecture.
Biological function summary	Junctional adhesion molecule 2 participates in a range of processes related to the formation and maintenance of tight junctions. It is a component of the tight junction complex interacting with other proteins to influence barrier function in vascular and epithelial tissues. This molecule is involved in leukocyte transmigration which is essential during inflammation as leukocytes need to exit the bloodstream to reach sites of infection or injury. It partners with other tight junction proteins which assists in its role in cell adhesion dynamics.
Pathways	JAM-B is involved in the regulation of the leukocyte adhesion cascade and tight junction signaling. Its function is interlinked with the integrin and chemokine pathways influencing leukocyte migration. Junctional adhesion molecule 2 associates with proteins like integrins and PECAM-1 playing a part in the orchestration of cellular movements and interactions that are critical to proper immune response and tissue homeostasis.
Associated diseases and disorders	Junctional adhesion molecule 2 correlation exists with inflammatory diseases and cancer. Its role in leukocyte transmigration links it to inflammatory conditions where increased or disrupted JAM-B expression can affect immune cell infiltration and inflammation severity. In cancer aberrant JAM-B expression can influence tumor growth and metastasis due to its impact on cell adhesion and migration. JAM-B interacts with PD-1 in the context of these diseases highlighting its part in immune regulation and signaling networks associated with tumor progression.

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

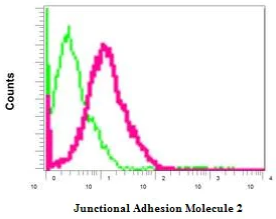
We do not recommend this combination. It is not covered by our product promise.

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.

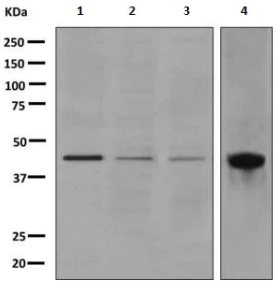
2 product images



Flow Cytometry (Intracellular) - Anti-Junctional Adhesion Molecule 2/JAM-B antibody [EPR2489(2)] (ab156586)

Junctional Adhesion Molecule 2/JAM-B Flow Cytometry (Intracellular) staining using rabbit Anti-Junctional Adhesion Molecule 2/JAM-B antibody

Intracellular flow cytometric analysis of permeabilized A431 cells labeling Junctional Adhesion Molecule 2/JAM-B using ab156586 at a 1/100 dilution (red) or a rabbit IgG control (green).



Western blot - Anti-Junctional Adhesion Molecule 2/JAM-B antibody [EPR2489(2)] (ab156586)

All lanes:
Western blot - Anti-Junctional Adhesion Molecule 2/JAM-B antibody [EPR2489(2)] (ab156586) at 1/1000 dilution

Lane 1:
HUVEC cell lysates at 10 µg

Lane 2:
HeLa cell lysates at 10 µg

Lane 3:
JAR cell lysates at 10 µg

Lane 4:
A431 cell lysates at 10 µg

Secondary

All lanes:
HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 33 kDa

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