

Datasheet: MCA2346

Description:	RAT ANTI MOUSE CD321
Specificity:	CD321
Other names:	JAM-1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	H202-106
Isotype:	IgG1
Quantity:	0.25 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/100 - 1/200
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

Target Species	Mouse
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	MTE1/MTE2 stromal cell lines.

**External Database
Links**

UniProt:

[O88792](#) [Related reagents](#)

Entrez Gene:

[16456](#) F11r [Related reagents](#)

Synonyms

Jam1, Jcam, Jcam1

Fusion Partners

Cells from immunised Lou rats were fused with cells of the X63 mouse myeloma cell line.

Specificity

Rat anti Mouse CD321 antibody, clone H202-106 recognizes murine CD321, also known as junctional adhesion molecule 1 (JAM-1). CD321 is a 274 amino acid ~32-4 kDa single pass, type I transmembrane glycoprotein, which shares similarities with related proteins JAM-2 and JAM-3.

CD321 is a multifunctional protein primarily expressed by platelets, endothelial and epithelial cells. The CD321 protein co-localises with tight junction molecules in both epithelial and endothelial cells and plays an important role in the regulation of junctional integrity and permeability. In addition, CD321 is a ligand for the integrin LFA-1 and is also involved in the transmigration of leucocytes.

Flow Cytometry

Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

References

1. Malergue, F. *et al.* (1998) A novel immunoglobulin superfamily junctional molecule expressed by antigen presenting cells, endothelial cells and platelets. [Mol Immunol. 35 \(17\): 1111-9.](#)
2. Aurrand-lions, M. *et al.* (2001) Heterogeneity of endothelial junctions is reflected by differential expression and specific subcellular localization of the three JAM family members. [Blood. 98 \(13\): 3699-707.](#)
3. Prestwich, R.J. *et al.* (2009) Immune-mediated antitumor activity of reovirus is required for therapy and is independent of direct viral oncolysis and replication. [Clin Cancer Res. 15 \(13\): 4374-4381.](#)
4. Ebnet, K. *et al.* (2000) Junctional adhesion molecule interacts with the PDZ domain-containing proteins AF-6 and ZO-1. [J Biol Chem. 275 \(36\): 27979-88.](#)
5. Schmitt, M.M. *et al.* (2014) Endothelial junctional adhesion molecule-a guides monocytes into flow-dependent predilection sites of atherosclerosis. [Circulation. 129 \(1\): 66-76.](#)
6. Morita, Y. *et al.* (2010) Heterogeneity and hierarchy within the most primitive hematopoietic stem cell compartment. [J Exp Med. 207 \(6\): 1173-82.](#)

Storage

Store at +4°C or at -20°C if preferred.
Storage in frost-free freezers is not recommended.
This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

18 months from date of despatch.

**Health And Safety
Information**

Material Safety Datasheet documentation #10040 available at:
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®549 , DyLight®649 , DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP

Recommended Negative Controls

[RAT IgG1 NEGATIVE CONTROL \(MCA1211\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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