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 product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product 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 (NaN_3)

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
RRID	AB_567266
Fusion Partners	Cells from immunized 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 1kDa 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 10µl of the suggested working dilution to label 10^6 cells in 100µl
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. 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. 4. 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. 5. Morita, Y. *et al.* (2010) Heterogeneity and hierarchy within the most primitive hematopoietic stem cell compartment. J Exp Med. 207 (6): 1173-82. 6. 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.
7. Narni-Mancinelli, E. *et al.*. (2017) Complement factor P is a ligand for the natural killer cell-activating receptor NKp46. Sci Immunol; 2(10): eaam9628.
8. Nagatake, T. *et al.* (2020) Selective expression of claudin-5 in thymic endothelial cells regulates the blood-thymus barrier and T-cell export. Int Immunol. Oct 10 dxaa069 [Epub ahead of print].

Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C. Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA2346 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR131...)	Alk. Phos., Biotin
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®550, DyLight®650, DyLight®800
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR16...)	DyLight®800

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M414602:221212'

Printed on 25 Mar 2023