Datasheet: MCA2346

BATCH NUMBER 164871

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. 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. 3. 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. 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 (STAR73...)	RPE
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
Goat Anti Rat IgG (STAR131...)	Alk. Phos., Biotin
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (STAR69...)	FITC

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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 18 Jan 2024