

Datasheet: MCA2183EL BATCH NUMBER 163386

Description:	RAT ANTI MOUSE CD13:Low Endotoxin
Specificity:	CD13
Other names:	AMINOPEPTIDASE N
Format:	Low Endotoxin
Product Type:	Monoclonal Antibody
Clone:	R3-63
lsotype:	lgG2a
Quantity:	0.5 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 <u>www.bio-rad-antibodies.com/protocols</u>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	-			1/50 - 1/100
Immunohistology - Frozen	-			
Immunohistology - Paraffin (1)	■			
ELISA			•	
Immunoprecipitation				
Western Blotting				
Immunofluorescence				
Functional Assays	•			

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.

(1)This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose. See <u>Bertilaccio et al.</u> for details.

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	None present
Carrier Free	Yes
Endotoxin Level	< 0.01 EU/µg
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Mouse intestinal APN
External Database Links	UniProt: P97449 Related reagents Entrez Gene: 16790 Anpep Related reagents
Synonyms	Lap1, Lap-1
RRID	AB_2056870
Fusion Partners	Spleen cells from immunized mice were fused with cells of the IR983F rat myeloma cell line.
Specificity	Rat anti Mouse CD13 antibody, clone R3-63 recognizes mouse aminopeptidase N (APN), a cell surface protein homologous with human CD13. In the mouse, CD13 is a non-covalently linked homodimer of approximately 150 kDa subunits expressed by a variety of cells including monocytes, macrophages, dendritic cell and veiled cells. Rat anti Mouse CD13 antibody, clone R3-63 has been reported to block mouse APN enzyme activity (Hansen <i>et al.</i> 1993).
Flow Cytometry	Use 10µl of the suggested working dilution to label 10^6 cells in $100µl$
References	 Kamoun, W.S. <i>et al.</i> (2009) Edema control by cediranib, a vascular endothelial growth factor receptor-targeted kinase inhibitor, prolongs survival despite persistent brain tumor growth in mice. J Clin Oncol. 27: 2542-52. Hansen, A.S. <i>et al.</i> (1993) A mouse aminopeptidase N is a marker for antigen-presenting cells and appears to be co-expressed with major histocompatibility complex class II molecules. Eur J Immunol. 23 (9): 2358-64. Larsen, S.L. <i>et al.</i> (1996) T cell responses affected by aminopeptidase N (CD13)-mediated trimming of major histocompatibility complex class II-bound peptides. J Exp Med. 184 (1): 183-9.

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16. Körbelin J *et al.* (2016) A brain microvasculature endothelial cell-specific viral vector with the potential to treat neurovascular and neurological diseases. <u>EMBO Mol Med. 8 (6):</u> 609-25.

17. Zotz, J.S. et al. (2016) CD13/aminopeptidase N is a negative regulator of mast cell activation. <u>FASEB J. 30 (6): 2225-35.</u>

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Mural Cell Depletion From Cerebral Small Vessels. <u>Front Aging Neurosci. 12: 151.</u>
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systemic AAVs with endothelial-specific tropism in rodents and broad tropism in primates. Nat Commun. 14 (1): 3345.

Storage	Store at -20°C only. This product should be stored undiluted. Storage in frost-free freezers is not recommended. Avoid repea as this may denature the antibody. Should this product contain recommend microcentrifugation before use.	а а
Guarantee	12 months from date of despatch	
Health And Safety Information	Material Safety Datasheet documentation #10162 available at: https://www.bio-rad-antibodies.com/SDS/MCA2183EL 10162	
Regulatory	For research purposes only	

Related Products

Recommended Secondary Antibodies

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

Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL:Low Endotoxin (MCA1212EL)

Recommended Useful Reagents

ANTIGEN RETRIEVAL BUFFER, pH8.0 (BUF025A)

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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 'M414874:221214'

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