

# Datasheet: MCA1317F

Description:	MOUSE ANTI HUMAN CD26:FITC		
Specificity:	CD26		
Other names:	DPP4		
Format:	FITC		
Product Type:	Monoclonal Antibody		
Clone:	M-A261		
lsotype:	lgG1		
Quantity:	0.1 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	-			Neat		
	Where this product ha	s not been test	ted for u	ise in a particular teo	chnique 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	Human						
Product Form	Purified IgG conjugate	ed to Fluoresce	in Isothi	ocyanate Isomer 1 (	(FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max	x (nm)	Emission Max (nm)			
	FITC	490		525	_		
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant						
Buffer Solution	Phosphate buffered saline						
Preservative 0.09% sodium azide (NaN <sub>3</sub> )							
Stabilisers	1% bovine serum albumin						
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml						

Immunogen	Human T-cell leukemia cells (T-CLL)
External Database Links	UniProt: <u>P27487</u> <u>Related reagents</u> Entrez Gene: <u>1803</u> DPP4 <u>Related reagents</u>
Synonyms	ADCP2, CD26
RRID	AB_321551
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse P3.X63 Ag8.653 myeloma cell line
Specificity	<b>Mouse anti Human CD26 antibody, clone M-A261</b> , recognizes human dipeptidyl peptidase 4, also known as adenosine deaminase complexing protein 2, CD26, TP103, ADABP or DPP IV. CD26 is a 766 amino acid ~110 kDa single pass type II transmembrane glycoprotein expressed by activated T cells, B cells and macrophages. A soluble form of CD26 can be derived by cleavage of the membrane bound form between residues 38-39 (Uniprot: 27487).
	CD26 acts as a functional receptor for the pathogenic Middle East respiratory syndrome coronavirus [MERS-CoV] ( <u>Raj <i>et al.</i> 2014</u> ), a severe and frequently fatal disease in humans and marmosets sharing identical CD26 sequence at the site of interaction with the MERS-CoV spike protein ( <u>Lu <i>et al.</i> 2013</u> , <u>Wang <i>et al.</i> 2013</u> ).
	Mouse anti Human CD26 antibody, clone M-A261 has been used successfully for the immunohistochemical detection of CD26 on formalin fixed, paraffin embedded tissues and the demonstration of elevated CD26 expression in thyroid neoplasia ( <u>Kholová <i>et al.</i> 2003</u> ). Mouse anti Human CD26 antibody, clone M-A261 has also been used for the immunohistochemical detection of CD26 on cryostat sections using both immunoperoxidase and immunofluorescence staining in liver biopsies from NASH patients ( <u>Balaban <i>et al.</i> 2007</u> ).
Flow Cytometry	Use 10 $\mu$ I of the suggested working dilution to label 10 <sup>6</sup> cells or 100 $\mu$ I whole blood
References	<ol> <li>Berg, L.P. <i>et al.</i> (2002) Functional consequences of noncognate interactions between CD4+ memory T lymphocytes and the endothelium. <u>J Immunol. 168 (7): 3227-34.</u></li> <li>James, M.J. (2003) Anergic T cells exert antigen-independent inhibition of cell-cell interactions via chemokine metabolism. <u>Blood.102: 2173-9.</u></li> <li>Kholová, I. <i>et al.</i> (2003) Immunohistochemical detection of dipeptidyl peptidase IV (CD 26) in thyroid neoplasia using biotinylated tyramine amplification. <u>Neoplasma. 50: 159-64.</u></li> <li>Le Naour, F. <i>et al.</i> (2006) Profiling of the tetraspanin web of human colon cancer cells. <u>Mol Cell Proteomics. 5: 845-57.</u></li> <li>Lutz, M.S. and Burk, R.D. (2006) Primary cilium formation requires von hippel-lindau gene function in renal-derived cells. <u>Cancer Res. 66: 6903-7.</u></li> </ol>

<u>Hepatol. 6: 242-50.</u>	
7. Snooks, M.J. et al. (2008) Vectorial entry and release of hepatitis A virus in polarize	ed
human hepatocytes. <u>J Virol. 82: 8733-42.</u>	
8. Post, S. et al. (2010) Impaired recruitment of HHT-1 mononuclear cells to the ischae	emic
heart is due to an altered CXCR4/CD26 balance. Cardiovasc Res. 85: 494-502.	
9. Akilov, O.E. et al. (2012) Resistance of Sézary cells to TNF-α-induced apoptosis is	
mediated in part by a loss of TNFR1 and a high level of the IER3 expression. Exp	
Dermatol. 21: 287-92.	
10. Sun, A.L. et al. (2012) Dipeptidyl peptidase-IV is a potential molecular biomarker ir	n
diabetic kidney disease. <u>Diab Vasc Dis Res. 9: 301-8.</u>	
11. Krijnen, P.A. et al. (2012) Loss of DPP4 activity is related to a prothrombogenic sta	atus
of endothelial cells: implications for the coronary microvasculature of myocardial infarc	ction
patients. <u>Basic Res Cardiol. 107: 233.</u>	
	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. This product is photosensitive and should be	
protected from light.	
12 months from date of despatch	
Material Safety Datasheet documentation #10041 available at:	
https://www.bio-rad-antibodies.com/SDS/MCA1317F	
10041	
	<ul> <li>7. Snooks, M.J. <i>et al.</i> (2008) Vectorial entry and release of hepatitis A virus in polarized human hepatocytes. J Virol. 82: 8733-42.</li> <li>8. Post, S. <i>et al.</i> (2010) Impaired recruitment of HHT-1 mononuclear cells to the ischal heart is due to an altered CXCR4/CD26 balance. Cardiovasc Res. 85: 494-502.</li> <li>9. Akilov, O.E. <i>et al.</i> (2012) Resistance of Sézary cells to TNF-α-induced apoptosis is mediated in part by a loss of TNFR1 and a high level of the IER3 expression. Exp Dermatol. 21: 287-92.</li> <li>10. Sun, A.L. <i>et al.</i> (2012) Dipeptidyl peptidase-IV is a potential molecular biomarker i diabetic kidney disease. Diab Vasc Dis Res. 9: 301-8.</li> <li>11. Krijnen, P.A. <i>et al.</i> (2012) Loss of DPP4 activity is related to a prothrombogenic star of endothelial cells: implications for the coronary microvasculature of myocardial infarce patients. Basic Res Cardiol. 107: 233.</li> <li>This product is shipped at ambient temperature. It is recommended to aliquot and stor -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C short term use (up to 4 weeks) and store the remaining aliquots at -20°C.</li> <li>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.</li> <li>12 months from date of despatch</li> <li>Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1317E</li> </ul>

### Related Products

#### **Recommended Negative Controls**

#### MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

#### **Recommended Useful Reagents**

#### HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M409159:221017'

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