

# Datasheet: MCA1317 BATCH NUMBER 0512R

Description:	otion: MOUSE ANTI HUMAN CD26		
Specificity:	CD26		
Other names:	DPP4		
Format:	Purified		
Product Type:	Monoclonal Antibody		
Clone:	M-A261		
Isotype:	lgG1		
Quantity:	0.2 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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	•			1/50 - 1/100
Immunohistology - Frozen (1)	-			
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. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

(1)The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.

Target Species	Human	
Product Form	Purified IgG - liquid	
Preparation	Purified IgG prepared by affinity chromatography on Protein (supernatant	G from tissue culture

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1 mg/ml
Immunogen	Human T-cell leukemia cells (T-CLL)
External Database Links	UniProt: P27487 Related reagents  Entrez Gene: 1803 DPP4 Related reagents
Synonyms	ADCP2, CD26
RRID	AB_321550
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse P3.X63 Ag8.653 myeloma cell line
Specificity	Mouse anti Human CD26 antibody, clone M-A261, 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] (Raj et al. 2014), 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 (Lu et al. 2013, Wang et al. 2013).  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 (Kholová et al. 2003). 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 (Balaban et al. 2007).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells or 100ul whole blood
Histology Positive	Thymus

#### References

- 1. Berg, L.P. *et al.* (2002) Functional consequences of noncognate interactions between CD4+ memory T lymphocytes and the endothelium. <u>J Immunol. 168 (7): 3227-34.</u>
- 2. Post, S. *et al.* (2010) Impaired recruitment of HHT-1 mononuclear cells to the ischaemic heart is due to an altered CXCR4/CD26 balance. Cardiovasc Res. 85: 494-502.
- 3. Balaban, Y.H. *et al.* (2007) Dipeptidyl peptidase IV (DDP IV) in NASH patients. <u>Ann</u> Hepatol. 6: 242-50.
- 4. Krijnen, P.A. *et al.* (2012) Loss of DPP4 activity is related to a prothrombogenic status of endothelial cells: implications for the coronary microvasculature of myocardial infarction patients. <u>Basic Res Cardiol. 107: 233.</u>
- 5. Kholová, I. *et al.* (2003) Immunohistochemical detection of dipeptidyl peptidase IV (CD 26) in thyroid neoplasia using biotinylated tyramine amplification. Neoplasma. 50: 159-64.
- 6. 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>
- 7. James, M.J. (2003) Anergic T cells exert antigen-independent inhibition of cell-cell interactions via chemokine metabolism. Blood.102: 2173-9.
- 8. Snooks, M.J. *et al.* (2008) Vectorial entry and release of hepatitis A virus in polarized human hepatocytes. <u>J Virol. 82: 8733-42</u>.
- 9. Sun, A.L. *et al.* (2012) Dipeptidyl peptidase-IV is a potential molecular biomarker in diabetic kidney disease. <u>Diab Vasc Dis Res. 9: 301-8.</u>
- 10. Le Naour, F. *et al.* (2006) Profiling of the tetraspanin web of human colon cancer cells. Mol Cell Proteomics. 5: 845-57.
- 11. 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. <u>Exp</u> Dermatol. 21: 287-92.

#### Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1317">https://www.bio-rad-antibodies.com/SDS/MCA1317</a> 10040
Regulatory	For research purposes only

### Related Products

#### **Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12...) RPE
Goat Anti Mouse IgG IgA IgM (STAR87...) HRP

Goat Anti Mouse IgG (STAR76...)

Rabbit Anti Mouse IgG (STAR13...)

HRP

Goat Anti Mouse IgG (STAR70...)

FITC

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550,

DyLight®650, DyLight®680, DyLight®800,

FITC, HRP

Rabbit Anti Mouse IgG (STAR9...) <u>FITC</u>
Goat Anti Mouse IgG (STAR77...) HRP

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

**Recommended Negative Controls** 

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

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 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
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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 'M365128:200529'

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