Datasheet: MCA1317T

Description:	MOUSE ANTI HUMAN CD26
Specificity:	CD26
Other names:	DPP4
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	M-A261
Isotype:	IgG1
Quantity:	25 µg

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	▪			1/50 - 1/100
Immunohistology - Frozen (1)	▪			
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.

(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 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 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_2246084
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 10µl of the suggested working dilution to label 10^6 cells or 100µl whole blood
Histology Positive Control Tissue	Thymus

References	1. Berg, L.P. *et al.* (2002) Functional consequences of noncognate interactions between CD4+ memory T lymphocytes and the endothelium. J Immunol. 168 (7): 3227-34. 2. James, M.J. (2003) Anergic T cells exert antigen-independent inhibition of cell-cell interactions via chemokine metabolism. Blood.102: 2173-9. 3. Kholová, I. *et al.* (2003) Immunohistochemical detection of dipeptidyl peptidase IV (CD 26) in thyroid neoplasia using biotinylated tyramine amplification. Neoplasma. 50: 159-64. 4. Le Naour, F. *et al.* (2006) Profiling of the tetraspanin web of human colon cancer cells. Mol Cell Proteomics. 5: 845-57. 5. Lutz, M.S. and Burk, R.D. (2006) Primary cilium formation requires von hippel-lindau gene function in renal-derived cells. Cancer Res. 66: 6903-7. 6. Balaban, Y.H. *et al.* (2007) Dipeptidyl peptidase IV (DDP IV) in NASH patients. Ann Hepatol. 6: 242-50. 7. Snooks, M.J. *et al.* (2008) Vectorial entry and release of hepatitis A virus in polarized human hepatocytes. J Virol. 82: 8733-42. 8. 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. 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 in diabetic kidney disease. Diab Vasc Dis Res. 9: 301-8. 11. 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. Basic Res Cardiol. 107: 233.
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/MCA1317T 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., HRP
Goat Anti Mouse IgG (STAR76...)	RPE

Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP
Goat Anti Mouse IgG (STAR70...)	FITC

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

North & South America Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com

Worldwide Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com

Europe Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 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

'M409158:221017'

Printed on 12 Aug 2023