Datasheet: MCA1317F

Description:	MOUSE ANTI HUMAN CD26:FITC
Specificity:	CD26
Other names:	DPP4
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	M-A261
Isotype:	IgG1
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 www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat

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

Human

Product Form

Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em

Fluorophore	Excitation Max (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 Stabilisers

0.09% Sodium Azide
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:
P27487 Related reagents

	Entrez Gene: 1803 DPP4 Related reagents
Synonyms	ADCP2, CD26
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 10^6 cells or 100ul whole blood
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. 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. Ann 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. Basic Res Cardiol. 107: 233. 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. Cancer Res. 66: 6903-7. 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. J Virol. 82: 8733-42. 9. 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. 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. Exp Dermatol. 21: 287-92.

Storage	Store at +4ºC or at -20ºC if preferred. This product should be stored undiluted. Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life	18 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

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