

Datasheet: MCA1652A647

Description:	MOUSE ANTI BOVINE CD26:Alexa Fluor® 647		
Specificity:	CD26		
Other names:	WC10		
Format:	ALEXA FLUOR® 647		
Product Type:	Monoclonal Antibody		
Clone:	CC69		
Isotype:	lgG1		
Quantity:	100 TESTS/1ml		

# **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				1/2 - 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	Bovine				
Species Cross	Reacts with: Sheep	p			
Reactivity	<b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications of personal communications from the originators. Please refer to references indicated further information.				
Product Form	Purified IgG conjugated to Alexa Fluor® 647 - liquid				
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)		
	Alexa Fluor®647	650	665		
Preparation	Purified IgG prepar supernatant	red by affinity chromatog	raphy on Protein G from tissue cul	ture	
Buffer Solution	Phosphate buffere				

Preservative Stabilisers	0.09% sodium azide (NaN <sub>3</sub> ) 1% bovine serum albumin		
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml		
External Database Links	UniProt: P81425 Related reagents  Entrez Gene: 281122 DPP4 Related reagents		
Synonyms	CD26		
RRID	AB_2093852		
Specificity	Mouse anti Bovine CD26 antibody, clone CC69 recognizes bovine Dipeptidyl peptidase 4, also known as CD26, WC10, Adenosine deaminase complexing protein or Activation molecule 3 (Lee et al. 2001). Bovine CD26 is a 765 amino acid single pass type II transmembrane glycoprotein which can be cleaved between residues 37-38 to release a soluble form of the protein. CD26 can exist as a monomer, forms a homodimer for optimal dipeptidase activity or it can form a heterodimer with seprase.  CD26 is expressed by a subpopulation of CD2+ T cells, dendritic cells and weakly by most B cells and is also seen on some non-haematopoietic cells, especially gut epithelium. Myeloid cells and the majority of WC1+ve T cells do not express CD26.		
Flow Cytometry	Use 10μl of the suggested working dilution to label 10 <sup>6</sup> cells in 100μl		
References	<ol> <li>Howard, C.J. &amp; Naessens, J. (1993) Summary of workshop findings for cattle (tables 1 and 2). Vet Immunol Immunopathol. 39 (1-3): 25-47.</li> <li>Naessens, J. et al. (1993) Cross-reactivity of workshop antibodies with cells from domestic and wild ruminants. Vet Immunol Immunopathol. 39 (1-3): 283-90.</li> <li>Epardaud, M. et al. (2004) Enrichment for a CD26hi SIRP- subset in lymph dendritic cells from the upper aero-digestive tract. J Leukoc Biol. 76: 553-61.</li> <li>Contreras, V. et al. (2010) Existence of CD8α-like dendritic cells with a conserved functional specialization and a common molecular signature in distant mammalian species. J Immunol. 185: 3313-25.</li> <li>Ferret-Bernard, S. et al. (2010) Cellular and molecular mechanisms underlying the strong neonatal IL-12 response of lamb mesenteric lymph node cells to R-848. PLoS One. 5: e13705.</li> <li>Fries, P.N. et al. (2011) Age-related changes in the distribution and frequency of myeloid and T cell populations in the small intestine of calves. Cell Immunol. 271: 428-37.</li> <li>Fries, P. et al. (2011) Mucosal dendritic cell subpopulations in the small intestine of newborn calves. Dev Comp Immunol. 35 (10): 1040-51.</li> <li>Contreras, V. et al. (2012) Canine recombinant adenovirus vector induces an immunogenicity-related gene expression profile in skin-migrated CD11b* -type DCs. PLoS</li> </ol>		

### One. 7 (12): e52513.

9. Krueger, L.A. *et al.* (2016) Gamma delta T cells are early responders to *Mycobacterium avium* ssp. *paratuberculosis* in colostrum-replete Holstein calves. <u>J Dairy Sci. 99 (11):</u> 9040-50.

10. Wherry, T.L.T. *et al.* (2022) Effects of 1,25-Dihydroxyvitamin D<sub>3</sub> and 25-Hydroxyvitamin D<sub>3</sub> on PBMCs From Dairy Cattle Naturally Infected With *Mycobacterium avium* subsp. *paratuberculosis*. Front Vet Sci. 9: 830144.

### **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. This product is photosensitive and should be protected from light.

### Guarantee

12 months from date of despatch

# Acknowledgements

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# Health And Safety Information

Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1652A647">https://www.bio-rad-antibodies.com/SDS/MCA1652A647</a>

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### Regulatory

For research purposes only

### Related Products

# **Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL: Alexa Fluor® 647 (MCA928A647)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

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

Email: antibody sales us@bio-rad.com

Email: antibody sales uk@bio-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 'M410949:221031'

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