

# Datasheet: MCA1652G

Description:	ription: MOUSE ANTI BOVINE CD2		
Specificity:	CD26		
Other names:	WC10		
Format:	Purified		
Product Type:	Monoclonal Antibody		
Clone:	CC69		
lsotype:	lgG1		
Quantity:	0.25 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	-			1/50 - 1/200
	Immunohistology - Frozen			•	
	Immunohistology - Paraffin				
	ELISA			•	
	Immunoprecipitation	-			
	Western Blotting			•	
	Where this product has r necessarily exclude its us a guide only. It is recomn system using appropriate	se in sucl nended th	n procedu nat the us	res. Suggested workin er titrates the product f	g dilutions are given as
Target Species	Bovine				
Species Cross Reactivity	Reacts with: Sheep <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 or personal communications from the originators. Please refer to references indicated for further information.				
Product Form	Purified IgG - liquid				
Preparation	Purified IgG prepared by supernatant	affinity c	hromatog	raphy on Protein G froi	m tissue culture

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% sodium azide (NaN <sub>3</sub> )
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
External Database Links	UniProt:       P81425       Related reagents         P81425       Related reagents         Entrez Gene:       281122       DPP4         Related reagents
Synonyms	CD26
RRID	AB_2093851
Specificity	<ul> <li>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 <i>et al.</i> 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.</li> <li>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<sup>+ve</sup> T cells do not express CD26.</li> </ul>
Flow Cytometry	Use 10µl of the suggested working dilution to label $10^6$ cells in $100µ$ l
References	<ol> <li>Howard, C.J. &amp; Naessens, J. (1993) Summary of workshop findings for cattle (tables 1 and 2). <u>Vet Immunol Immunopathol. 39 (1-3): 25-47.</u></li> <li>Naessens, J. <i>et al.</i> (1993) Cross-reactivity of workshop antibodies with cells from domestic and wild ruminants. <u>Vet Immunol Immunopathol. 39 (1-3): 283-90.</u></li> <li>Epardaud, M. <i>et al.</i> (2004) Enrichment for a CD26hi SIRP- subset in lymph dendritic cells from the upper aero-digestive tract. <u>J Leukoc Biol. 76: 553-61.</u></li> <li>Contreras, V. <i>et al.</i> (2010) Existence of CD8α-like dendritic cells with a conserved functional specialization and a common molecular signature in distant mammalian species. <u>J Immunol. 185: 3313-25.</u></li> <li>Ferret-Bernard, S. <i>et al.</i> (2010) Cellular and molecular mechanisms underlying the strong neonatal IL-12 response of lamb mesenteric lymph node cells to R-848. <u>PLoS One.</u> <u>5: e13705.</u></li> <li>Fries, P.N. <i>et al.</i> (2011) Age-related changes in the distribution and frequency of myeloid and T cell populations in the small intestine of calves. <u>Cell Immunol. 271: 428-37.</u></li> <li>Fries, P. <i>et al.</i> (2011) Mucosal dendritic cell subpopulations in the small intestine of</li> </ol>

	<ul> <li>newborn calves. <u>Dev Comp Immunol. 35 (10): 1040-51.</u></li> <li>8. Contreras, V. <i>et al.</i> (2012) Canine recombinant adenovirus vector induces an immunogenicity-related gene expression profile in skin-migrated CD11b<sup>+</sup> -type DCs. <u>PLoS One. 7 (12): e52513.</u></li> <li>9. Krueger, L.A. <i>et al.</i> (2016) Gamma delta T cells are early responders to <i>Mycobacterium avium</i> ssp. <i>paratuberculosis</i> in colostrum-replete Holstein calves. <u>J Dairy Sci. 99 (11): 9040-50.</u></li> <li>10. Wherry, T.L.T. <i>et al.</i> (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 <i>Mycobacterium avium</i> subsp. <i>paratuberculosis</i>. <u>Front Vet Sci. 9: 830144.</u></li> </ul>		
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/MCA1652G 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) <u>Alk. Phos.</u> , <u>HRP</u>			
Goat Anti Mouse IgG (STAR76)	RPE		
Goat Anti Mouse IgG (Fc) (STAR120)	FITC, HRP		
Rabbit Anti Mouse IgG (STAR13)	HRP		
Goat Anti Mouse IgG (STAR70)	<u>FITC</u>		
Goat Anti Mouse IgG (H/L) (STAR117)	<u>Alk. Phos.</u> , <u>DyLight®488</u> , <u>DyLight®550</u> ,		
	DyLight®650, DyLight®680, DyLight®800,		
	FITC, HRP		
Rabbit Anti Mouse IgG (STAR9)	<u>FITC</u>		
<b>Recommended Negative Controls</b>			

### MOUSE IgG1 NEGATIVE CONTROL (MCA928)

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89
	Email: antibody_sales_us@bio-ra	ad.com	Email: antibody_sales_uk@bio	-rad.com	Email: antibody

#### Printed on 19 Jan 2024

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