

# Datasheet: MCA1654G

Description:	MOUSE ANTI BOVINE CD8 BETA
Specificity:	CD8 BETA
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	CC58
lsotype:	lgG1
Quantity:	0.25 mg

## **Product Details**

RRID	AB_905995					
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					
	Immunohistology - Frozen			•		
	Immunohistology - Paraffin			•		
	ELISA			•		
	Immunoprecipitation	-				
	Western Blotting			•		
	Functional Assays			•		
	Where this antibody has no	ot been tes	sted for use	in a particular technique	this does not necessarily	
	exclude its use in such pro	cedures. S	Suggested v	working dilutions are give	n as a guide only. It is	
	recommended that the use					
	negative/positive controls.		,	,	0 11 1	
Target Species Species Cross	Bovine Reacts with: Sheep, Goat,	Water Buf	falo			
Reactivity	<b>N.B.</b> Antibody reactivity an	d working	conditions I	may vary between specie	S.	
Product Form	Purified IgG - liquid					
Preparation	Purified IgG prepared by a	ffinity chro	matography	/ on Protein G from tissue	e culture supernatant	
Buffer Solution	Phosphate buffered saline					
Preservative Stabilisers	0.09% Sodium Azide					
Carrier Free	Yes					
Approx. Protein	IgG concentration 1.0 mg/ml					

### Concentrations

Specificity       Mouse anti Bovine CD8 beta antibody, clone CC58 recognizes an epitope associated with the bovine CD8 beta chain. CD8 is usually expressed as an ofβ heterodimer. Mouse anti Bovine CD8 beta antibody, clone CC58 has been successfully used for the immunohistochemical detection of CD8 on formalin fixed, paraffin embedded placental tissue from water buffalo (Cantón <i>et al.</i> 2014).         Flow Cytometry       Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.         References       1. Suraud, V. <i>et al.</i> (2008) Acute infection by conjunctival route with Brucella melitensis induces lg6- cells and IFN-gamma producing cells in pelipheral and mucosal lymph nodes in sheep. Microbes Infect. 10: 1370-8.         Neward, C.J. & Naessens, J. <i>et al.</i> (1993) Summary of workshop findings for cattle (tables 1 and 2). Vet Immunol Immunopathol. 39 (1-3): 25-47.         3. Nessens, J. <i>et al.</i> (1991) Nomenclature and characterization of leukocyte differentiation antigenes in runinants. Immunol Today 18 (8): 365-8.         4. Hein, W.R. <i>et al.</i> (1991) Nomenclature and characterization of leukocyte antigens of sheep. Vel Immunol Immunopathol. 27 (1-3): 28-30.         5. Gerner, W. <i>et al.</i> (2009) Identification of major histocompatibility complex restriction and anchor residues of fooch-and-mouth disease virus-derived bovine T-cell epitopes. J. Virol. 83: 4039-50.         6. Gerner, W. <i>et al.</i> (2001) Sensitive detection of Foxp3 expression in bovine lymphocytes by flow cytometry. Vel Immunol Immunopathol. 132: 154-8.         7. MacHugh, N.D. and Sopp, P. (1991) Individual antigens of cattle. Bovine CD8 (BoCD8). Vel Immunol Immunopathol. 27: 65-9.         8. Sottys, J. and Quinn, M.T. (1999) Selective re		
References       1. Suraud, V. et al. (2008) Acute infection by conjunctival route with Brucella melitensis induces IgG+ cells and IFN-gamma producing cells in peripheral and mucosal lymph nodes in sheep. Microbes Infect. 10: 1370-8.         2. Howard, C.J. & Naessens, J. (1993) Summary of workshop findings for cattle (tables 1 and 2). Vet Immunol Immunopathol. 39 (1-3): 25-47.         3. Naessens, J. et al. (1997) Nomenclature and characterization of leukocyte differentiation antigens in ruminants. Immunol Today. 18 (8): 365-8.         4. Hein, W.R. et al. (1997) Nomenclature and characterization of leukocyte antigens of sheep. Vet Immunol Immunopathol. 37 (1-3): 28-30.         5. Gerner, W. et al. (2009) Identification of major histocompatibility complex restriction and anchor residues of foot-and-mouth disease virus-derived bovine T-cell epitopes. J Virol. 83: 4039-50.         6. Gerner, W. et al. (2010) Sensitive detection of Foxp3 expression in bovine lymphocytes by flow cytometry. Vet Immunol Immunopathol. 138: 154-8.         7. MacHugh, N.D. and Sopp, P. (1991) Individual antigens of cattle. Bovine CD8 (BoCD8). Vet Immunol Immunopathol. 27: 65-9.         8. Soltys, J. and Quin, M.T. (1999) Selective recruitment of T-cell subsets to the udder during staphylococcal mastitis: analysis of lymphocyte subsets and adhesion molecule expression. Infect Immun. 67: 6283-302.         9. Cathón, G. J. et al. (2010) Enhancing the toolbox to study IL-17A in cattle and sheep. Vet Res. 48 (1): 20.         Storage       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.	Specificity	bovine CD8 beta chain. CD8 is usually expressed as an $\alpha/\beta$ heterodimer. Mouse anti Bovine CD8 beta antibody, clone CC58 has been successfully used for the immunohistochemical detection of
IgG+ cells and IFN-gamma producing cells in peripheral and mucosal lymph nodes in sheep.         Microbes Infect. 10: 1370-8.         2. Howard, C.J. & Naessens, J. (1993) Summary of workshop findings for cattle (tables 1 and 2).         Vet Immunol Immunopathol. 39 (1-3): 25-47.         3. Naessens, J. <i>et al.</i> (1997) Nomenclature and characterization of leukocyte differentiation antigens in ruminans. Immunol Today. 18 (8): 365-8.         4. Hein, W.R. <i>et al.</i> (1991) Summary of workshop findings for leukocyte antigens of sheep. Vet Immunol Immunopathol. 27 (1-3): 28-30.         5. Gerner, W. <i>et al.</i> (2009) Identification of major histocompatibility complex restriction and anchor residues of foot-and-mouth disease virus-derived bovine T-cell epitopes. J. Virol. 83: 4039-50.         6. Gerner, W. <i>et al.</i> (2010) Sensitive detection of Foxp3 expression in bovine lymphocytes by flow cytometry. Vet Immunol Immunopathol. 138: 154-8.         7. MacHugh, N.D. and Sopp, P. (1991) Individual antigens of cattle. Bovine CD8 (BoCD8). Vet Immunol Immunopathol. 27: 65-9.         8. Soltys, J. and Quinn, M.T. (1999) Selective recruitment of T-cell subsets to the udder during staphylococcal and streptococcal mastitis: analysis of lymphocyte subsets and adhesion molecule expression. Infect Immun. 67: 6293-302.         9. Cantón, G.J. <i>et al.</i> (2014) Characterization of immune cell infiltration in the placentome of water buffaloes (Bubalus bubalis) infected with neospora caninum during pregnancy. J Comp Pathol. 150: 463-8.         10. Wattegedera, S.R. <i>et al.</i> (2017) Enhancing the toolbox to study IL-17A in cattle and sheep. Vet Res. 48 (1): 20.         Storage       Storage in fr	Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
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.         Shelf Life       18 months from date of despatch.         Health And Safety       Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf	References	<ul> <li>IgG+ cells and IFN-gamma producing cells in peripheral and mucosal lymph nodes in sheep. <u>Microbes Infect. 10: 1370-8.</u></li> <li>2. 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>3. Naessens, J. <i>et al.</i> (1997) Nomenclature and characterization of leukocyte differentiation antigens in ruminants. <u>Immunol Today. 18 (8): 365-8.</u></li> <li>4. Hein, W.R. <i>et al.</i> (1991) Summary of workshop findings for leukocyte antigens of sheep. <u>Vet</u> <u>Immunol Immunopathol. 27 (1-3): 28-30.</u></li> <li>5. Gerner, W. <i>et al.</i> (2009) Identification of major histocompatibility complex restriction and anchor residues of foot-and-mouth disease virus-derived bovine T-cell epitopes. <u>J Virol. 83: 4039-50.</u></li> <li>6. Gerner, W. <i>et al.</i> (2010) Sensitive detection of Foxp3 expression in bovine lymphocytes by flow cytometry. <u>Vet Immunol Immunopathol. 138: 154-8.</u></li> <li>7. MacHugh, N.D. and Sopp, P. (1991) Individual antigens of cattle. Bovine CD8 (BoCD8). <u>Vet Immunol Immunopathol. 27: 65-9.</u></li> <li>8. Soltys, J. and Quinn, M.T. (1999) Selective recruitment of T-cell subsets to the udder during staphylococcal and streptococcal mastitis: analysis of lymphocyte subsets and adhesion molecule expression. <u>Infect Immun. 67: 6293-302.</u></li> <li>9. Cantón, G.J. <i>et al.</i> (2014) Characterization of immune cell infiltration in the placentome of water buffaloes (<i>Bubalus bubalis</i>) infected with <i>neospora caninum</i> during pregnancy. <u>J Comp Pathol. 150: 463-8.</u></li> <li>10. Wattegedera, S.R. <i>et al.</i> (2017) Enhancing the toolbox to study IL-17A in cattle and sheep. <u>Vet</u></li> </ul>
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.         Shelf Life       18 months from date of despatch.         Health And Safety       Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf	Storage	Store at +4°C or at -20°C if preferred.
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       Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf		This product should be stored undiluted.
Health And Safety       Material Safety Datasheet documentation #10040 available at:         Information       10040: <u>https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</u>		may denature the antibody. Should this product contain a precipitate we recommend
Information 10040: <u>https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</u>	Shelf Life	18 months from date of despatch.
Regulatory For research purposes only		-
	Regulatory	For research purposes only

## **Related Products**

### **Recommended Secondary Antibodies**

Goat Anti Mouse IgG IgA IgM (STAR87...) <u>Alk. Phos.</u>, <u>HRP</u>

Goat Anti Mouse IgG (STAR77)	HRP
Rabbit Anti Mouse IgG (STAR12)	RPE
Rabbit Anti Mouse IgG (STAR8)	DyLight®800
Rabbit Anti Mouse IgG (STAR13)	HRP
Goat Anti Mouse IgG (STAR76)	RPE
Goat Anti Mouse IgG (STAR70)	<u>FITC</u>
Goat Anti Mouse IgG (Fc) (STAR120)	FITC, HRP
Rabbit Anti Mouse IgG (STAR9)	<u>FITC</u>
Goat Anti Mouse IgG (H/L) (STAR117)	Alk. Phos., DyLight®488, DyLight®549,
	<u>DyLight®649</u> , <u>DyLight®680</u> , <u>DyLight®800</u> ,
	<u>FITC, HRP</u>

### **Recommended Negative Controls**

#### MOUSE IgG1 NEGATIVE CONTROL (MCA928)

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-ra	ad.com	Email: antibody_sales_uk@bio-r	ad.com	Email: antibody_sales_de@bio-rad.com

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