Datasheet: MCA5778

Description:	MOUSE ANTI BOVINE CD28
Specificity:	CD28
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	CC220
Isotype:	IgG1
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	▪			
Functional Assays	▪			

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

Target Species	Bovine
Product Form	Purified IgG - liquid
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 (NaN_3)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Plasmid DNA encoding the bovine CD28 gene.
External Database Links	**UniProt:** Q28071 Related reagents **Entrez Gene:**

281050 CD28 Related reagents

Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the SP2/0 myeloma cell line.
Specificity	**Mouse anti Bovine CD28, clone CC220** recognizes the bovine homologue of human CD28, a co-stimulatory cell surface molecule expressed by T cell subsets. CD28 is the receptor for CD80 (B7.1) and CD86 (B7.2). Mouse anti Bovine CD28, clone CC220 is able to stimulate bovine T lymphocytes in combination with anti-bovine CD3 (Nishimori *et al.* 2017). For functional use, the use of the preservative free format (MCA5778EL) is recommended. Mouse anti Bovine CD28, clone CC220 has also been published under the alternative designation F849CD10 (Hogg *et al.* 2011 & Guzman *et al.* 2014).
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10^6 cells in 100ul.
References	1. Hogg, A.E. *et al.* (2011) Characterization of age-related changes in bovine CD8+ T-cells. Vet Immunol Immunopathol. 140 (1-2): 47-54. 2. Goto, S. *et al.* (2017) Increase of cells expressing PD-1 and PD-L1 and enhancement of IFN-γ production via PD-1/PD-L1 blockade in bovine mycoplasmosis. Immun Inflamm Dis. 5 (3): 355-363. 3. Nishimori, A. *et al.* (2017) *In vitro* and *in vivo* antivirus activity of an anti-programmed death-ligand 1 (PD-L1) rat-bovine chimeric antibody against bovine leukemia virus infection. PLoS One. 12 (4): e0174916.
Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted.
Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Human Anti Mouse IgG1 (HCA036...)	HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®549, DyLight®649, DyLight®680, DyLight®800, FITC, HRP

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

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