

Datasheet: MCA5779PE

BATCH NUMBER 157590

Description:	MOUSE ANTI BOVINE CD28:RPE
Specificity:	CD28
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	CC219
Isotype:	IgG1
Quantity:	100 TEST

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	Bovine		
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized		
Reconstitution	Reconstitute with 1.0 ml distilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)		
	1% Bovine Serum Albumin		
	5% Sucrose		

Immunogen	Plasmid DNA encoding the bovine CD28 gene
External Database Links	<p>UniProt: Q28071 Related reagents</p> <p>Entrez Gene: 281050 CD28 Related reagents</p>
RRID	AB_11152773
Fusion Partners	Spleen cells from immunized Balb/c mice were fused with cells of the SP/2/0 myeloma cell line
Specificity	<p>Mouse anti Bovine CD28, clone CC219, 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). CD28 is involved in increased production of IL-4 and IL-10 in T cells.</p> <p>Mouse anti Bovine CD28, clone CC219 is able to stimulate bovine T cells in combination with anti-bovine CD3. For functional assays it is recommended to use the low endotoxin and preservative free format of this antibody, MCA5779EL.</p> <p>Mouse anti Bovine CD28, clone CC219 has previously been published under the alternative clone designation F848EC4 (Hogg et al. 2011).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> Hogg, A.E. <i>et al.</i> (2011) Characterization of age-related changes in bovine CD8+ T-cells. Vet Immunol Immunopathol. 140 (1-2): 47-54. Palomo, F.R. (2015) Study of the Effects Caused by BVDV and BHV-1 on Antigen-Presenting Cells by Means of <i>In Vivo</i> and <i>In Vitro</i> Experimental Models. Tesis Doctoral, Facultad de Veterinaria, Universidad de Córdoba Risalde, M.A. <i>et al.</i> (2020) BVDV permissiveness and lack of expression of co-stimulatory molecules on PBMCs from calves pre-infected with BVDV. Comp Immunol Microbiol Infect Dis. 68: 101388. Stabel, J.R. <i>et al.</i> (2022) B cell phenotypes and maturation states in cows naturally infected with <i>Mycobacterium avium</i> subsp. <i>Paratuberculosis</i>. PLoS One. 17 (12): e0278313.
Storage	<p>Prior to reconstitution store at +4°C.</p> <p>After reconstitution store at +4°C.</p> <p>DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
Guarantee	12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #20487 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA5779PE>
20487

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

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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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)
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