Datasheet: MCA5779PE

BATCH NUMBER INN0411R

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	**UniProt:** Q28071 Related reagents **Entrez Gene:** 281050 CD28 Related reagents
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	**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. 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. Mouse anti Bovine CD28, clone CC219 has previously been published under the alternative clone designation F848EC4 (Hogg *et al.* 2011).
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. Palomo, F.R. (2015) Study of the Effects Caused by BVDV and BHV-1 on Antigen-Presenting Cells by Means of *In Vivo* and *In Vitro* Experimental Models. Tesis Doctoral, Facultad de Veterinaria, Universidad de Córdoba 3. Risalde, M.A. *et al.* (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. 4. Stabel, J.R. *et al.* (2022) B cell phenotypes and maturation states in cows naturally infected with *Mycobacterium avium* subsp. *Paratuberculosis*. PLoS One. 17 (12): e0278313.
Storage	Prior to reconstitution store at +4°C. After reconstitution store at +4°C. 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.
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

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

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